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Published by the
PEABODY MUSEUM OF NATURAL HISTORY
YALE UNIVERSITY
New Haven, CT 06520-8118

Number 222
14 June 2000

A Type Catalog of Fossil Invertebrates (Mollusca: Ammonoidea) in the Yale Peabody Museum

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This portrait (opposite) shows Karl M. Waage in the field collecting ammonites from the late Cretaceous Fox Hills Formation of South Dakota, where he spent most of his professional career.

Oil painting by Rudolph F. Zallinger, 1986.

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ISBN 0-912532-53-X
Printed in the U.S.A.

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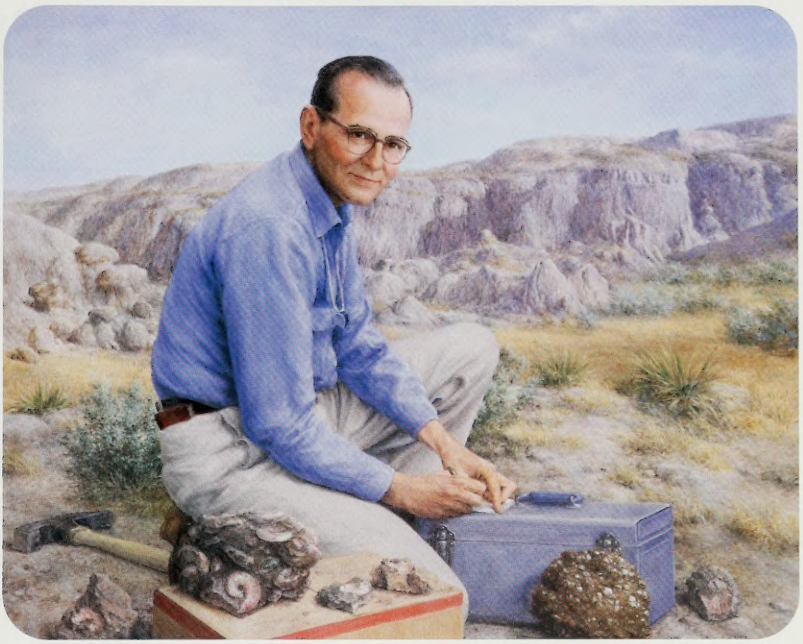

KARL M. WAAGE, Alan M. Bateman Professor Emeritus of Geology and Geophysics at Yale University, was Curator of Invertebrate Paleontology at the Peabody Museum of Natural History from 1946 to 1986, as well as a past director (1979-1982) of the Peabody. This series of type catalogs of invertebrate fossils is dedicated to Karl, who passed away on October 18, 1999 at the age of 83.

After receiving his doctorate from Princeton University in 1946, Karl joined the faculty of the Yale Geology Department. He served as chair of the department between 1973 and 1976 and was named to the Bateman Professorship in 1977. Karl was active in the Paleontological Society, serving as a Councillor between 1974 and 1976. His research on the paleontology and stratigraphy of the Upper Cretaceous Fox Hills Formation of South Dakota resulted in the publication of two definitive monographs on the paleoenvironments (Waage 1968) and ammonite fauna (Landman and Waage 1993) of the Fox Hills. During his tenure at Yale he was advisor to more than 25 graduate students, many of whom have become leaders in the field of paleobiology.

In the 1950s, Karl worked with Carl O. Dunbar to redesign the Peabody Museum's Invertebrate Hall with a new emphasis on the life history and evolution of invertebrates. Their textbook on historical geology used many specimens from the Peabody collections to demonstrate geological and paleontological principles. In the early 1960s, Karl directed a major renovation of Peabody's research collections and facilities, including a series of National Science Foundation grants to reorganize the paleontological collections and expand laboratory facilities for graduate education. These type catalogs, published as part of the Peabody's *Postilla* series, are the outgrowth of an NSF funded project to identify and isolate all type specimens from the fossil invertebrate collections and carries on Karl's initiative to improve the care and accessibility of the Peabody's paleontological collections.

For the inspiration he gave me, I am honored to dedicate this series of type catalogs to Karl, my mentor, friend and "Chief."

Russell D. "Tim" White

Peabody Museum
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Russell D. White and Laura K. Skorina

(Received 12 August 1999)

Abstract

Type material for 206 nominal species of ammonoids are in the Invertebrate Paleontology Collections of Yale University's Peabody Museum of Natural History. Primary types for 86 nominal species include 46 holotypes, 418 syntypes (representing 36 nominal species), 3 lectotypes and 1 neotype. Secondary types for 35 nominal species include 7 allotypes, 105 paratypes and 36 paralectotypes. Tertiary types of 132 nominal species include 852 hypotypes. Most types are from Coahuila (Mexico), South Dakota, Texas and Wyoming and have been described by E. Böse, S.S. Buckman, W.A. Cobban, N.H. Landman, A.K. Miller and K.M. Waage.

Key Words

Type Catalog, Ammonoidea, Yale Peabody Museum, Coahuila (Mexico), South Dakota, Texas, Wyoming, E. Böse, S.S. Buckman, W.A. Cobban, N.H. Landman, A.K. Miller and K.M. Waage.

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ISBN No. 0-912532-53-X

Introduction

This catalog lists all known ammonoid types in the Invertebrate Paleontology Collections housed in Yale University's Peabody Museum of Natural History. This is the eleventh in a series of type catalogs of fossil invertebrates and is a product of an ongoing computerization project to improve the accessibility of the type collections.

Eight type specimens are missing and cannot be located. The collections have been thoroughly searched by the curatorial staff in the 1960s and 1990s and it is believed that these specimens are permanently lost. Missing specimens are indicated with a footnote, and any information on their whereabouts would be greatly appreciated.

Organization

Specimens are listed under the originally described binomen; genera and species within genera are indexed alphabetically. Each entry includes the catalog number used by the Division of Invertebrate Paleontology prefixed with the abbreviation YPM and the type status of the original designation, followed by all known references to that name. Any subsequent designations are listed under the original designation and are cross-referenced in the body of the text. Locality descriptions follow each entry or set of entries for each binomen. Errors and inconsistencies are footnoted at the bottom of each binomen.

The type designations used are holotype, syntype, lectotype and neotype for name bearers; allotype, paratype and paralectotype

for secondary types; hypotype is used for all tertiary types. Name bearers and secondary types are defined as used in the *International Code of Zoological Nomenclature* (ICZN 1985). Tertiary types or hypotypes are treated here as any specimens used in an original species description but not explicitly designated primary or secondary types, any described, figured or measured specimen used in a publication to augment the knowledge of a previously defined species, or any referenced specimen that cannot be placed unequivocally in a known species (e.g., *Hoploscaphites* sp.).

Locality descriptions follow each entry or set of entries with identical locality data. The locality information includes the stratigraphy, geography, collector and date. Stratigraphy has been standardized using *Stratigraphic Nomenclature Databases for the United States, its Possessions and Territories* (MacLachlan et al. 1992).

Catalog of Ammonoidea

Adrianites adamsi Miller and Furnish

HOLOTYPE YPM 16761

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.115, tf.30A, pl.27, f.1,2.

Permian, Word Fm. First limestone member, section 24, 0.8 mi W of Word Ranch, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

Adrianites beyrichi? Haniel

HYPOTYPE YPM 16312

Miller, A.K. and W.M. Furnish. 1939. Palaeont. Zeit. bd.21, p.300.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.117, tbl.4.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.97, pl.28, f.1-3.

HYPOTYPE YPM 16313[a]

Miller, A.K. and W.M. Furnish. 1939. Palaeont. Zeit. bd.21, p.300, tf.2A'-E'.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.117, tbl.4, tf.28A'-E'.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.97, pl.28, f.4-6.

HYPOTYPE YPM 16314

Miller, A.K. and W.M. Furnish. 1939. Palaeont. Zeit. bd.21, p.300.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.117, tbl.4.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.97, pl.28, f.7-10.

HYPOTYPE YPM 16315

Miller, A.K. and W.M. Furnish. 1939. Palaeont. Zeit. bd.21, p.300.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.117.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.97.

HYPOTYPE YPM 16727[a]

Miller, A.K. and W.M. Furnish. 1939. Palaeont. Zeit. bd.21, p.300, tf.2A'-E'.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.117, tf.28A'-E'.

=*Adrianites dunbari* Miller and Furnish. SYNTYPE. Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.97.

Early Permian, Leonardian, Leonard Fm. Section 12, bed 1, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

Adrianites defordi Miller and Furnish

SYNTYPE YPM 16762

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.114, pl.27, f.7,8.

SYNTYPE YPM 16763

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.114, tf.30B, pl.27, f.9-12.

SYNTYPE YPM 16764A, 16764B

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.114.

Early Permian, Leonardian, Leonard Fm. Middle Leonard, S of Sullivan Peak, Glass Mountains, Brewster Co., Texas, USA. Collector: Schuchert, C.

***Adrianites dunbari* Miller and Furnish**
See *Adrianites beyrichi*? Miller and Furnish.

***Adrianites newelli* Miller and Furnish**

SYNTYPE YPM 16317

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.117.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.99, pl.29, f.15,16.

Early Permian, Leonardian, Leonard Fm. Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

SYNTYPE YPM 16318

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.117.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.99, pl.29, f.13,14.

Early Permian, Leonardian, Leonard Fm. Upper Leonard, SE of James Ranch, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

SYNTYPE YPM 16319[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.117.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.99.

Early Permian. Bed 20 of Malascachas section, directly overlying limestone of bed 21, yellow-brown graywacke 1200 m S61E of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

[a]This is a specimen lot of five fragments.

***Adrianites plummeri* Miller**

HOLOTYPE YPM 16320

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.99, tf.14B, pl.35, f.1,2.

Late Permian. Beds 5, 6 and 7 of Malascachas section, area 1200 m S17W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Agathiceras contractum* Plummer and Scott**
See *Agathiceras* sp.

***Agathiceras frechi* Böse**

HYPOTYPE YPM 16766

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.119, pl.27, f.3-6.

Early Permian, Wolfcampian, Wolfcamp Fm. Section 24, *Uddenites* Mbr, bed 1B, Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Agathiceras* sp.**

HYPOTYPE YPM 15946

Böse, E. 1917. Texas Univ. Bull. n.1762, p.193.

=*Agathiceras contractum* Plummer and Scott. HOLOTYPE. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.125, pl.29, f.11,12.[a]

Early Permian, Wichita Grp, Clyde Fm. About 4 mi S of Electra, Wichita Co., Texas, USA. Collector: Wrather, W.E.

HYPOTYPE YPM 16765

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.120.

Early Permian, Leonardian, Leonard Fm. Section 12, near middle of bed 24, below hill 4920, and N of Peabody Locality B3052, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]Incorrectly cited as T-8890 on pl.29, f.11.

***Agathiceras suessi* Gemmellaro**

HYPOTYPE YPM 15229

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.118, pl.31, f.12.

HYPOTYPE YPM 15230A

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.118, pl.31, f.8,9.[a]

HYPOTYPE YPM 15230B

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.118, pl.31, f.10.[b]

HYPOTYPE YPM 15230C

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.118, pl.31, f.11.[c]

Permian, Sosio Beds. Calcare Compatto, Palermo, Sicily, Italy.

[a]Not pl.31, f.10 as stated in the plate explanation.

[b]Not YPM 15320A as stated in the explanations for pl.31, f.10.

[c]Not YPM 15320A as stated in the explanations for pl.31, f.11.

***Ammonites syriacus* Von Buch**

HYPOTYPE YPM 1784[a]

Conrad, T.A. 1852. Washington, D.C. (U.S.) Natl. Obs. p.221.

Beecher, C.E. 1900. Am. J. Sci. v.159, p.177.[b]

=*Knemiceras compressum subcompressum* Hyatt. SYNTYPE. Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.150, pl.16, f.14.

HYPOTYPE YPM 24806

Conrad, T.A. 1852. Washington, D.C. (U.S.) Natl. Obs. p.221.

Beecher, C.E. 1900. Am. J. Sci. v.159, p.177.[c]

=*Knemiceras syriacum*. Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.146, pl.16, f.6,7,8.

Cretaceous. Mount Lebanon [Lebanon Range], Lebanon.

[a]This includes one specimen and a cast.

[b]Incorrectly cited as a paratype of *Ammonites syriacus* Conrad.

[c]Incorrectly cited as *Ammonites syriacus* Conrad, paratype.

***Artinskia adkinsi* Plummer and Scott**

PARATYPE YPM 15936

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.93.

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.48, tf.8A.[a]

Miller, A.K. and W. Youngquist. 1947a. Univ. Kans. Paleont. Contrib. Mollusca, Art.1, p.7, tf.1C.

Early Permian, Wichita Grp, Admiral Fm. 4.5 mi S of Coleman, Coleman Co., Texas, USA. Collector: Plummer, F.B.

[a]Cited as a paratype in the explanation for tf.8; however, this specimen was not referred to individually in Plummer and Scott (1937).

***Artinskia electraensis* Plummer and Scott**

See *Medlicottia* n. sp.

***Baculites asper* Morton**

HYPOTYPE YPM 6415[a]

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4.

HYPOTYPE YPM 6415A

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4, pl.1, f.19-21.

HYPOTYPE YPM 6415B

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4, pl.1, f.22-24.

HYPOTYPE YPM 6415C

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4, pl.2, f.1-5.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

[a]This consists of 12 fragments representing approximately three specimens.

***Baculites codyensis* Reeside**

HOLOTYPE YPM 6408C

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4, pl.2, f.6-10.

HYPOTYPE YPM 6408[a]

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4.

HYPOTYPE YPM 6408A

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4, pl.2, f.11-13.

HYPOTYPE YPM 6408B

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4, pl.2, f.14-16.

HYPOTYPE YPM 6408D

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4, pl.2, f.17-19.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

[a]This consists of 15 fragments representing approximately three specimens.

***Baculites compressus* Say**

HYPOTYPE YPM 35102

Landman, N.H. 1982. Discovery v.16, n.2, p.21, f.(lower left,bottom).

HYPOTYPE YPM 35103

Landman, N.H. 1982. Discovery v.16, n.2, p.21, f.(lower left,upper left).

HYPOTYPE YPM 35104

Landman, N.H. 1982. Discovery v.16, n.2, p.21, f.(lower left,upper right).

Late Cretaceous, Pierre Shale. Sage Creek, Pennington Co., South Dakota, USA.

***Baculites haresi* Reeside**

HYPOTYPE YPM 34700, 34710

Hicks, J.F., J.D. Obradovich and L. Tauxe. 1995. J. Geol. v.103. p.246.

Late Cretaceous, Telegraph Creek Fm, Elk Basin Sandstone Mbr, *Scaphites hippocrepsis* 1 Zone. Top surface of uppermost unit of Elk Basin, N-S butte top ridge, E side of basinal cove of anticline, 0.5-0.7 mi due N of Elk Basin Village (abandoned), Elk Basin, Elk Basin Quad., straddles Range line E SIDE SE NE NE sec24T58NR100W, straddles Range line W SIDE SW NW NW sec19T58NR99W, SE SE SE sec35T9SR100W, Carbon Co., Montana, USA. Collector: Hicks, J.F., 1992.

***Baculites* sp.**

HYPOTYPE YPM 6406, 6412, 6412A

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.4.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

HYPOTYPE YPM 50156[a]

Jacobs, D.K. 1990. Paleobio. v.16, n.3, tbl.1.

Late Cretaceous, Maastrichtian, Montana Grp, Pierre Shale, Mobridge Mbr. Float and spot samples in upper Mobridge, black shale in W half of RR cut, just E of new RR bridge and causeway of Milwaukee RR, across Grand River (cut made in summer of 1959), 2.5 mi S of Wakpala, Wakpala SE Quad., N NW NW sec15T19NR29E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Mello, J.F., 1959.

[a]This specimen was sawed along the dorsal-ventral axis by D.K. Jacobs.

***Baculites thomi* Reeside**

HYPOTYPE YPM 34719

Hicks, J.F., J.D. Obradovich and L. Tauxe. 1995. J. Geol. v.103. p.246.

Late Cretaceous, Telegraph Creek Fm, Elk Basin Sandstone Mbr, *Scaphites hippocrepsis* 1 Zone. Top surface of uppermost unit of Elk Basin, N-S butte top ridge, E side of basinal cove of anticline, 0.5-0.7 mi due N of Elk Basin Village (abandoned), Elk Basin, Elk Basin Quad., straddles Range line E SIDE SE NE NE sec24T58NR100W, straddles Range line W SIDE SW NW NW sec19T58NR99W, SE SE SE sec35T9SR100W, Carbon Co., Montana, USA. Collector: Hicks, J.F., 1992.

***Beyrichoceras hornerae* Miller**

HOLOTYPE YPM 17112

Miller, A.K. 1947. J. Paleont. v.21, n.1, p.21, tf.2B,3, pl.10, f.4-7.

Gordon, M., Jr. 1964. U.S. Geol. Surv. Prof. Pap. n.460, p.183, tf.43A,43B, pl.17, f.34-37.

Mississippian, Boone Fm. Lower Boone chert boulder, embedded in creek bed, 1.47 mi S30E of county courthouse in Cassville, Cassville Quad., NE NW SE sec33T23NR27W, Barry Co., Missouri, USA. Collector: Horner, E.H.

***Binneyites parkensis* Reeside**

HOLOTYPE YPM 6420

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.5, pl.3, f.1-5.

Cobban, W.A. 1961. J. Paleont. v.35, n.4, p.754, pl.89, f.36,37.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

***Cibolites mojsisovicsi* Miller**

SYNTYPE YPM 15301

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.124.

=*Cibolites waageni* (Miller and Furnish). HYPOTYPE. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.267.

SYNTYPE YPM 16289[a], 16295[b], 55009–55028, 55037–55060

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.124.

SYNTYPE YPM 16292

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.124, pl.42, f.1.

=*Cibolites waageni* (Miller and Furnish). HYPOTYPE. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.267.

SYNTYPE YPM 16293

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.124, pl.42, f.2-4.

=*Cibolites waageni* (Miller and Furnish). HYPOTYPE. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.267.

SYNTYPE YPM 16294

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.124, pl.42, f.5.

=*Cibolites waageni* (Miller and Furnish). HYPOTYPE. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.267.

SYNTYPE YPM 16298

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.124, tf.29c.[c]

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

[a]This is represented by approximately 40 fragments.

[b]This is represented by approximately 20 fragments.

[c]Suture pattern illustration not recognizable on specimen, but marked as such on label.

***Cibolites* sp.**

HYPOTYPE YPM 16297

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, tf.18B.

Early Permian, Leonardian, Leonard Fm. Section 12, bed 1, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Cibolites uddeni* Plummer and Scott**

HYPOTYPE YPM 16803A

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.72, pl.6, f.3,4.

HYPOTYPE YPM 16803B

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.72.

Permian, Word Fm. Upper Word, section 10, beds 8 and 9, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Cibolites waageni* (Miller and Furnish)**
See *Cibolites mojsisovicsi* Miller and *Xenodiscites waageni* Miller and Furnish.

***Clymenia undulata* Münster**

HYPOTYPE YPM 2513

Bucher, H., N.H. Landman, S.M. Klofak and J. Guex. 1996. Top. Geobio. v.13, p.422.

Devonian. Ebersdorf, Germany.

***Daraelites leonardensis* Miller and Furnish**

HOLOTYPE YPM 16775

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.63, tf.16C, pl.33, f.6,7.

Early Permian, Leonardian, Leonard Fm. Middle Leonard, S of Sullivan Peak, Glass Mountains, Brewster Co., Texas, USA. Collector: Schuchert, C.

***Daraelites meeki* Gemmellaro**

HYPOTYPE YPM 15214

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.62, tf.16D, pl.33, f.10-12.

HYPOTYPE YPM 15214A

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.62.

Permian, Sosio Beds. Calcare Compatto, Palermo, Sicily, Italy.

***Daraelites scotti* Miller and Furnish**

HYPOTYPE YPM 15931

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.62, tf.16A.

HYPOTYPE YPM 15938

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.62.

Middle Pennsylvanian, Bend Grp, Smithwick Shale. 3 mi E of Rochelle, McCulloch Co., Texas, USA. Collector: Plummer, F.B.

***Daraelites texanus* Böse**

HYPOTYPE YPM 12930[a], 12930B

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.390.

HYPOTYPE YPM 12930A

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.390, pl.38, f.27-29.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S15E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

HYPOTYPE YPM 16776

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, pl.33, f.8,9.

Late Pennsylvanian, Gaptank Fm. *Uddenites* zone of the Gaptank Fm, Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16777

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, tf.16B.

Late Pennsylvanian, Gaptank Fm. Wolfcamp section, bed 1, *Uddenites* zone of Gaptank Fm, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]This is a lot of approximately 20 specimens.

***Dichotomoceras dichotomum* Buckman**

PARATYPE YPM 948

Buckman, S.S. 1920. S.S. Buckman: London (England) v.3, pl.139D, pl.139E, f.1,2.[a]

Late Jurassic, Argocian. England.

[a]Incorrectly cited as YPM 1868.

***Didymoceras nebrascense* (Meek)**

HYPOTYPE YPM 6093[a]

Hyatt, A. 1894. Proc. Am. Phil. Soc. v.32, n.143, p.574, pl.14, f.13,14.

Late Cretaceous, Fort Pierre Grp, Pierre Shale. 8 mi SE of Buffalo Gap, Custer Co., South Dakota, USA. Collector: Yale Hatcher Cretaceous Expedition, 1891.

[a]This includes one specimen and two casts.

***Didymoceras* sp.**

HYPOTYPE YPM 6092, 35001[a]

Rice, S.H. 1998. Paleobio. v.24, n.1, p.142, tf.9.

Late Cretaceous, Fort Pierre Grp, Pierre Shale. 8 mi SE of Buffalo Gap, Custer Co., South Dakota, USA. Collector: Yale Hatcher Cretaceous Expedition, 1891.

[a]This is a composite specimen, comprised of two individuals (YPM 6092 and YPM 35001).

***Dimorphoceras edwini* Miller and Furnish**

PARATYPE YPM 25716

Miller, A.K. and W.M. Furnish. 1940b. J. Paleont. v.14, n.4, p.366.

Late Mississippian. Near Crab Orchard, Rockcastle Co., Kentucky, USA. Collector: Fischer, M.

***Discoscaphites conradi* (Morton)**

HYPOTYPE YPM 23048[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.165(left).

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Limopsis-Gervillia* undifferentiated, part of SW-facing bluff of Whitehorse Ridge extending ESE and bounded on SE by gulch marking ridge break at fault, Whitehorse Ridge, 5-6 mi NW of Whitehorse, Whitehorse Quad., NW CORNER sec28T16NR26E, SE NE SW sec20T16NR26E,

Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Sohl, N., 1959.

HYPOTYPE YPM 27102

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.158E.

HYPOTYPE YPM 27103

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.158A.

HYPOTYPE YPM 27104

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.149E-H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies. Float, on outcrop and in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27106

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.153F,G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, *Gervillia* concretion, bluffs around SE end of spur, 1.5 mi E of Grand River, and 7.2 mi E of Miscol, Miscol NE Quad., SE SW SW sec14T20NR25E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27111

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.158F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, concretions in river bed, undifferentiated *Limopsis*-large *Gervillia* layers, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27112

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.158D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis* concretions?, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, concretion, probably *Limopsis* horizon, base of soil-covered slope along road on NW bluff of High Bank Creek, and 0.05 mi SW of turnoff to Good Shepherd Church, and 9.8 mi SW of Little Eagle, Little Eagle SW Quad., SE CORNER SW SE sec19T19NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 27115

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.158C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, *Gervillia* concretions, SW-facing bluffs of spur trending SE, 3 mi WNW of Little Eagle, Little Eagle Quad., CENTER S line sec13T20NR26E, CENTER NE sec24T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27120

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.158B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Gervillia* concretions, butte-like toe of SE-trending spur and adjoining outcrops and float areas, "Happy Hill," SE of Bench Mark Church, and about 6 mi WSW of Little Eagle, Little Eagle NW Quad., SW sec26T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27127

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.153H-J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Gervillia* concretions, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27128

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.153A,B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretion, boulder bank at N end of cut, bluffs along E side of Grand River, about 1.25 mi S of Bullhead, Bullhead Quad., CENTER N SW sec30T21NR25E, Corson Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27129

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.152H,J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretion, small slump blocks in lower bluffs on either side of S-draining draw, 0.5 mi due N of Mortonson Ranch house, and 5.5 mi WSW of Little Eagle, Little Eagle NW Quad., E EDGE N NE sec33T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1962.

HYPOTYPE YPM 27132

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.149I-K.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Limopsis* concretion, cut on E side of second roadcut N of Little Eagle on McLaughlin-Little Eagle Road, and 3.3 mi N of Little Eagle, Little Eagle Quad., CENTER E SE sec5T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 27133

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.153K.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Drepanochilus* concretions, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Float, concretions in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27182

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.149A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27183

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.150E-H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, *Limopsis-Gervillia* concretions undifferentiated, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27184

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.152B,E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Concretion 3, cut on E side of second roadcut N of Little Eagle on McLaughlin-Little Eagle Road, and 3.3 mi N of Little Eagle, Little Eagle Quad., CENTER E SE sec5T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956.

HYPOTYPE YPM 27185

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.150A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Concretions, top of unit 3 of section 2, SW-facing bluffs at W end of divide, W of trail, and about 1 mi E of Grand River, and 6 mi SE of Bullhead, Miscol NE Quad., CENTER E SE sec15T20NR25E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27186

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.152A,C,D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Drepanochilus* concretions, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Float, concretions in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27187

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.151F-H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Concretions, irregularly shaped spur with narrow SE-trending tip downfaulted so that lower barren concretions cap it, 0.3 mi E of SD Rte 63, SE of O'Leary Ranch house, and about 1 mi N of Moreau River, and 3.8 mi NNE of Green Grass, Parade NW Quad., NE SW SE

sec32T15NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27188

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.150I-K.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, concretions in river bed, undifferentiated *Limopsis*-large *Gervillia* layers, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27195

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.152F,G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Gervillia* concretions, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27196

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.154F-J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Drepanochilus* concretions, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretions, 4.5 ft below big *Gervillia* and 5 ft above *D. nic.* of LNAZ, unit 2 of section 2, SW-facing bluffs at W end of divide, W of trail, and about 1 mi E of Grand River, and 6 mi SE of Bullhead, Miscol NE Quad., CENTER E SE sec15T20NR25E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27197

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.154A-E.

HYPOTYPE YPM 27198

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.152K-M.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies. Float, on outcrop and in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27219

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.153C-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 34100[b]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, tf.161(left), app.2.26.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies. Lower Trail City, float, in grass roots, concretions, POAZ or UNAZ, exposures on SW side of small knoll, on W side of SD Rte 63, and about 0.2 mi SW of Peabody Locality C0030, SE of O'Leary Ranch house, and about 1 mi N of Moreau River, and 4 mi NNE of Green Grass, Parade NW Quad., W SW NW sec32T15NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 34101

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, app.2.27.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis* concretions?, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, concretion, probably *Limopsis* horizon, base of soil-covered slope along road on NW bluff of High Bank Creek, and 0.05 mi SW of turnoff to Good Shepherd Church, and 9.8 mi SW of Little Eagle, Little Eagle SW Quad., SE CORNER SW SE sec19T19NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 34102

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, app.2.28.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. *Drepanochilus* concretions, E end of SW-facing bluffs of spur trending SE, 3 mi WNW of Little Eagle, Little Eagle Quad., CENTER NE sec24T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 34103

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, app.2.29.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Limopsis* concretion, concretion 1, face and outcrops at 2 separate sites around S end of SSE-trending ridge at SW corner of Long's Ridge, and 7.3 mi W of Whitehorse, Little Moreau Lake Quad., SW NE SE SE sec15T15NR25E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 34104

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.194, app.2.31.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis* concretions?, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, concretion, probably *Limopsis* horizon, base of soil-covered slope along road on NW bluff of High Bank Creek, and 0.05 mi SW of turnoff to Good Shepherd Church, and 9.8 mi SW of Little Eagle, Little Eagle SW Quad., SE CORNER SW SE sec19T19NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 35157

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, frtp.5.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 35159

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, frtp.12.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies. Lower Trail City, float, concretions in river bed, undifferentiated LGAZ and upper LNAZ, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

[a]This specimen was dissected by N.H. Landman to expose the inner whorls.

[b]This specimen was sawed along the dorsal-ventral axis by N.H. Landman.

***Discoscaphites conradi conradi* (Morton)**

HYPOTYPE YPM 2076

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, p.1129, tbl.1, pl.1, f.5,6.

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Prairie Bluff, Wilcox Co., Alabama, USA.

HYPOTYPE YPM 2077

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, p.1129, tbl.1, pl.1, f.16,17.

HYPOTYPE YPM 2078

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, pl.1, f.14,15.

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Uniontown, Perry Co., Alabama, USA.

HYPOTYPE YPM 2079

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, p.1129, pl.1, f.7-9.

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Prairie Bluff, Wilcox Co., Alabama, USA.

***Discoscaphites conradi gulosus* (Morton)**

HYPOTYPE YPM 2080

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, p.1129, tbl.1.

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Prairie Bluff, Wilcox Co., Alabama, USA.

HYPOTYPE YPM 2083

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, p.1129, tbl.1, pl.3, f9-12.

Late Cretaceous, Selma Grp, Ripley Fm. Canton Bluff [presumably the bluffs along the Alabama River, 1 mi E of Canton Bend], Wilcox Co., Alabama, USA. Collector: Schowalter, E.R.

HYPOTYPE YPM 2085

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, p.1129, tbl.1.

Late Cretaceous, Selma Grp. "Rotten Limestone," Alabama River, Baldwin Co., Alabama, USA.

HYPOTYPE YPM 2086

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, p.1125, pl.2, f.8-11.[a]

=*Discoscaphites gulosus.* ALLOTYPE. Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212.[b]

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Prairie Bluff, Wilcox Co., Alabama, USA.

HYPOTYPE YPM 2089

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, p.1129, tf.1E.

HYPOTYPE YPM 2094

Jeletzky, J.A. and K.M. Waage. 1978. J. Paleont. v.52, n.5, p.1129, tbl.1.

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Prairie Bluff, Wilcox Co., Alabama, USA.

HYPOTYPE YPM 27094

Landman, N.H. and K.M. Waage. 1986. Lethaia v.19, p.218, f.7a.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, slumped about 6 ft, concretion, irregularly shaped spur with narrow SE-trending tip downfaulted so that lower barren concretions cap it, 0.3 mi E of SD Rte 63, SE of O'Leary Ranch house, and about 1 mi N of Moreau River, and 3.8 mi NNE of Green Grass, Parade NW Quad., NE SW SE sec32T15NR24E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

[a]Cited as a paratype, but not part of the original type series. Jeletzky and Waage (1978) intended to denote the opposite sex of the holotype.

[b]Cited as allotype, but not part of the original type series. Landman and Waage (1993) use the term to denote the opposite sex of the holotype.

Discoscaphites gulosus (Morton)

HYPOTYPE YPM 23045[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.17B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, *Limopsis-Gervillia* concretions undifferentiated, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 23050[b]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.179(left).

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion, in creek bed about 200 ft S of Strong's stock dam, 0.5 mi ESE of Paul Strong Ranch house, S of Moreau River, and 5.5 mi N of Parade, Parade Quad., NW CORNER NW SW sec8T13NR25E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Larson, N., 6/8/1981.

HYPOTYPE YPM 23051[b]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.179(right).

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. *Drepanochilus* concretions, E end of SW-facing bluffs of spur trending SE, 3 mi WNW of Little Eagle, Little Eagle Quad., CENTER NE sec24T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23736

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.172F-J, frtp.11.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Fox Hills Fm in type area, Dewey Co., Corson Co., and N half of Ziebach Co., Ziebach Co., South Dakota, USA.

HYPOTYPE YPM 27095

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.174E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. 3 concretions, chiefly NE side of narrow gully at SW end of Waage Locality 52, 3 mi SSW of Little Eagle, and 0.5 mi W of SD Rte 63, Little Eagle Quad., NW NE NW sec8T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27097

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.174A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Concretions, chiefly from upper LGAZ *Gervillia* concretions, roadcut on McLaughlin-Little Eagle Road through first hill

N of and about 2.8 mi N of Little Eagle, Little Eagle Quad., SE NE NE sec8T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956.

HYPOTYPE YPM 27110

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.167J,K,174F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis-Gervillia* Assemblage Zone. Layered, barrel-shaped concretion (upper *Gervillia* part =26f and lower *Limopsis* part = 26g), E-facing bluff of sharp ridge on W bank of Grand River at E-W part of bend, 2.5 mi S of Bullhead, Miscol NE Quad., CENTER NW sec6T20NR25E, Corson Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27114

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.169G-I.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Limopsis* concretion, SW slope of elongate, S-trending, flat-topped spur, Whitehorse Ridge, and 6 mi NW of Whitehorse, Whitehorse Quad., about in center of W EDGE SW SW sec20T16NR26E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 27117

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.174C.

HYPOTYPE YPM 27121

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.174B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27124

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.174D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Float accumulation from road widening and grading, concretions, road gutter and new (1964) cut on McLaughlin-Little Eagle Road ("roller-coaster road") on small hill about 4 mi S of Little Eagle, Little Eagle SE Quad., along section line S half of W EDGE SW SW sec9T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 27126

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.169D-F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Concretions, SW-facing bluffs of spur trending SE, 3 mi WNW of Little Eagle, Little Eagle Quad., CENTER S line sec13T20NR26E, CENTER NE sec24T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27189

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.170A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Float concretions, creek bottom below cut banks along Little Oak Creek, Bieber Ranch, and 7 mi SSW of Little Eagle, Little Eagle SE Quad., NE CORNER SW SE sec30T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1961 to 1962.

HYPOTYPE YPM 27190

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.167A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, *Protocardia* concretions, S end of divide 1.5 mi E of Redwater Creek, and about 13.5 mi N of Parade, Parade NE Quad., CENTER S N sec32T15NR25E, CENTER W E NW sec32T15NR25E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27191

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.168A-D, frtp.6.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E,

Corson Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27192

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.172A-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Limopsis* concretions, part of SW-facing bluff of Whitehorse Ridge extending ESE and bounded on SE by gulch marking ridge break at fault, Whitehorse Ridge, 5-6 mi NW of Whitehorse, Whitehorse Quad., NW CORNER sec28T16NR26E, SE NE SW sec20T16NR26E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Sohl, N., 1959.

HYPOTYPE YPM 27193

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.169A-C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Gravel pits, Moreau River Valley, Dewey Co., South Dakota, USA. Collector: Ross, H.

HYPOTYPE YPM 27194

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.171A-F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Concretions, base of unit 3 of section 2, SW-facing bluffs at W end of divide, W of trail, and about 1 mi E of Grand River, and 6 mi SE of Bullhead, Miscol NE Quad., CENTER E SE sec15T20NR25E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27199

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.168H-K.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Concretions, top of unit 3 of section 2, SW-facing bluffs at W end of divide, W of trail, and about 1 mi E of Grand River, and 6 mi SE of Bullhead, Miscol NE Quad., CENTER E SE sec15T20NR25E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27200

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.168E-G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Concretions, section A, 5.5 ft above base of unit 6, lot 3, exposure at toe at W end of spur, on E side of E tributary of Little Oak Creek, and 4 mi SSW of Little Eagle, Little Eagle Quad., SW SE NE sec7T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27201

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.172K-M.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float and in place, *Gervillia* concretions, butte-like toe of SE-trending spur and adjoining outcrops and float areas, "Happy Hill," SE of Bench Mark Church, and about 6 mi WSW of Little Eagle, Little Eagle NW Quad., SW sec26T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27202

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.170E-G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, layered-patchy concretion, outcrops, slumped in part, at toe of spur, S side of Grand River, and 8 mi SE of Little Eagle, Little Eagle SE Quad., E NW SW sec11T19NR27E, Corson Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27203

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.172N-Q.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, *Gervillia* concretion, northern of 3 sites, face on spur 0.8 mi SE of High Bank Creek, S of Grand River, and 5.7 mi SW of Little Eagle, Little Eagle SW Quad., N NE NE NE sec15T19NR26E, Corson Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27204

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.170H-J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretion, exposures along S side of Grand River, just E of small tributary gulley, and 1.2 mi ENE of Petersen Ranch house, and 4.5 mi ENE of Miscol, Miscol NE Quad., NE CORNER SW NE NW sec17T20NR25E, Corson Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27205

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.171I-K.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *abyssinus-mandanensis* Biofacies. 2 concretions between jarosite at top of Trail City and underlying *Nucula*-layer concretions, S-facing bluff along small, flat, E-trending spur, 0.8 mi SE of Petersen Ranch house, and 0.5 mi W of Grand River, and 3.9 mi ENE of Miscol, Miscol NE Quad., CENTER S EDGE SE sec18T20NR25E, CENTER N EDGE NE sec19T20NR25E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 27206

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.171G,H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Dewey Co., South Dakota, USA. Collector: Ross, H.

HYPOTYPE YPM 34105

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, app.2.32.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretion, small outcrops on shoulders of spurs E and W of main gully draining SW 1/4 of section 24, and 9 mi W of Little Eagle, Little Eagle NW Quad., CENTER E SW sec24T20NR25E, CENTER W SW sec24T20NR25E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1962.

HYPOTYPE YPM 34106[c]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.175(left), app.2.34.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, *Protocardia* concretions, S end of divide 1.5 mi E of Redwater Creek, and about 13.5 mi N of Parade, Parade NE Quad., CENTER S N sec32T15NR25E, CENTER W E NW sec32T15NR25E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 34107[c]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.175(right), app.2.35.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Float accumulation from road widening and grading, concretions, road gutter and new (1964) cut on McLaughlin-Little Eagle Road ("roller-coaster road") on small hill about 4 mi S of Little Eagle, Little Eagle SE Quad., along section line S half of W EDGE SW SW sec9T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 34108

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, app.2.37.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float and in place, several concretions on N side of knob, concretion-capped knob just E of Whitehorse-Timber Lake road, and 6 mi NW of Whitehorse, Whitehorse Quad., SW SW NW sec30T16NR26E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 34126

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.212, tf.24F,G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *abyssinus-mandanensis* Biofacies. Float, concretions, on top of cut, roadcut on E side of spur and W side of old US Rte 12 about 0.75 mi S of intersection with Wakpala road, N side of hill with Ridgeview 1954 benchmark, and 4.5 mi S of Mahto, Wakpala NW Quad., NW SW sec15T20NR28E, SW CORNER NW sec15T20NR28E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Barker, D., 1956.

HYPOTYPE YPM 35158

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, frtp.10.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float and in place, *Gervillia* concretions, butte-like toe of SE-trending spur and adjoining outcrops and

float areas, "Happy Hill," SE of Bench Mark Church, and about 6 mi WSW of Little Eagle, Little Eagle NW Quad., SW sec26T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

CAST OF HYPOTYPE YPM 35872[d]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, frtp.3(lower right).

Late Cretaceous, Fox Hills Fm, Trail City Mbr. South Dakota, USA.

See also *Discoscaphites conradi gulosus* (Morton).

[a]This specimen was dissected by N.H. Landman and a median section was prepared from the inner whorls.

[b]This specimen was dissected by N.H. Landman to expose the inner whorls.

[c]This specimen was sawed along the dorsal-ventral axis by N.H. Landman.

[d]This is a cast. The original specimen, USNM 486023, is at the Smithsonian Institution.

Discoscaphites nebrascensis (Owen)

HYPOTYPE YPM 23166

Waage, K.M. 1968. Bull. Peabody Mus. Nat. Hist. (Yale Univ.) n.27, pl.7, f.b.

=*Jeletzkytes nebrascensis*. Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p. 161.

Late Cretaceous, Fox Hills Fm, Timber Lake Mbr, *Cucullaea* Assemblage Zone. Concretion, about 8 ft below level of 1957 *Sphenodiscus* concretions, upper sand, sand bank, RR cut at Lantry Dam, 1.5 mi WNW of Lantry, Lantry Quad., CENTER SW SW sec4T12NR22E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

Discoscaphites rossi Landman and Waage

HOLOTYPE YPM 23052

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.181A-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Around top of SE-trending spur, in field SW of stock pond, 0.2 mi SSW of Fred Kost Ranch house, and 1 mi E of SD Rte 63, and 2.2 mi NNE of High Elk Hill, and 3.5 mi SSW of Eagle Butte Village, High Elk Hill Quad., CENTER W SW SW sec31T12NR24E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1983.

ALLOTYPE YPM 23090

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.181Q-T.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Kost Ranch, 3 mi SSW of Eagle Butte Village [same area as Waage Locality 305], Lantry Quad., Ziebach Co., South Dakota, USA. Collector: Parsons, D.J.

HYPOTYPE YPM 23083

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.182G,H.

HYPOTYPE YPM 23085

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.181J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Kost Ranch, 3 mi SSW of Eagle Butte Village [same area as Waage Locality 305], Lantry Quad., Ziebach Co., South Dakota, USA. Collector: Parsons, D.J.

HYPOTYPE YPM 23093

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.182J-K.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, around top of SE-trending spur, in field SW of stock pond, 0.2 mi SSW of Fred Kost Ranch house, and 1 mi E of SD Rte 63, and 2.2 mi NNE of High Elk Hill, and 3.5 mi SSW of Eagle Butte Village, High Elk Hill Quad., CENTER W SW SW sec31T12NR24E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1983.

HYPOTYPE YPM 23094

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.181U,V.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Concretions, in road and roadcut, ridge-crest exposures along cutoff of secondary road, along top of small, sharp ridge that trends NW-SE from E1/2SW1/4sec32T12NR24E to NW CORNER NE1/4sec5T11NR24E, 3 mi due S of Eagle Butte Village, Herbert Creek Quad., E SW sec32T12NR24E, NW CORNER NE sec5T11NR24E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1957 to 1964.

HYPOTYPE YPM 23095

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.181K,L.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr, *abyssinus-mandanensis* Biofacies. Concretions, just below top of big *Sphenodiscus* Layer, top of first prominent spur 0.2 mi NW of S part of Peabody Locality C0088, and 2 mi SW of Green Grass, Lantry NE Quad., CENTER W W NE sec27T14NR23E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 23096

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.181O,P.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Concretions, in road and roadcut, ridge-crest exposures along cutoff of secondary road, along top of small, sharp ridge that trends NW-SE from E1/2SW1/4sec32T12NR24E to NW CORNER NE1/4sec5T11NR24E, 3 mi due S of Eagle Butte Village, Herbert Creek Quad., E SW sec32T12NR24E, NW CORNER NE sec5T11NR24E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1957 to 1964.

HYPOTYPE YPM 23097

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.182A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float on Timber Lake ridge N of main gully, exposures flanking gully head just W of SD Rte 63, at first sharp curve as road drops into breaks on N side of Moreau River, and 4.5 mi ENE of Green Grass, Parade NW Quad., NE SW NW sec32T15NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 23100

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.182E,F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr, *Sphenodiscus* Layer. Float, exposures on NW-facing bluff and spurs below it, overlooking Moreau River, and 1.5-2 mi SW of Green Grass, Lantry NE Quad., E NE sec27T14NR23E, NW CORNER sec26T14NR23E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 23103[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.189(left).

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 23105

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.182I.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, roadcuts along SD Rte 63 about 3.5 mi N of Moreau River bridge, and 5 mi NNE of Green Grass, Parade NW Quad., section line NE sec30T15NR24E, section line NW sec29T15NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1940.

HYPOTYPE YPM 23108

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.181M,N.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Kost Ranch, 3 mi SSW of Eagle Butte Village [same area as Waage Locality 305], Lantry Quad., Ziebach Co., South Dakota, USA. Collector: Parsons, D.J.

HYPOTYPE YPM 27081

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.182B-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 27084

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, tf.181H,I,184A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Concretions, in road and roadcut, ridge-crest exposures along cutoff of secondary road, along top of small, sharp ridge that trends NW-SE from E1/2SW1/4sec32,T12N,R24E to NW CORNER NE1/4sec5,T11N,R24E, 3 mi due S of Eagle Butte Village, Herbert Creek Quad., E SW sec32T12NR24E, NW CORNER NE sec5T11NR24E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1957 to 1964.

HYPOTYPE YPM 32291

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.231, app.2.40.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

[a]This specimen was dissected by N.H. Landman to expose the inner whorls.

***Discoscaphites* sp.**

HYPOTYPE YPM 34114[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.14D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Float, concretion 1, face and outcrops at 2 separate sites around S end of SSE-trending ridge at SW corner of Long's Ridge, and 7.3 mi W of Whitehorse, Little Moreau Lake Quad., SW NE SE SE sec15T15NR25E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 35095

Waage, K.M. 1968. Bull. Peabody Mus. Nat. Hist. (Yale Univ.) n.27, pl.12, f.e.

Late Cretaceous, Maastrichtian. Extensive badland exposures along but principally W of head of small drainage system running N to Moreau River, and 4 mi SE of Iron Lightning, Redelm NE Quad., W EDGE sec32T14NR19E, W EDGE sec33T14NR19E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., Speden, I.G., Waage, J., Thayer, C.W. and others, 1961 to 1967.

[a]This is an ammonitella on an SEM stub.

***Discoscaphites waagei* Birkelund**

CAST OF HYPOTYPE YPM 31803[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.110C-F.

Late Cretaceous, Maastrichtian. Derived Maastrichtian concretions in Danian conglomerate (Oyster-ammonite conglomerate), Agatkloft, 410 m above sea level, Agatdalen area, Nugssuaq peninsula, West Greenland, Greenland, Denmark. Collector: Birkelund, T., 1938.

[a]This is a cast. The original specimen is at the University of Copenhagen.

***Dunbarites rectilateralis* (Miller)**
See *Paralegoceras rectilaterale* Miller.

***Dunveganoceras pondi* Haas**

HYPOTYPE YPM 14897

Cobban, W.A. 1983. U.S. Geol. Surv. Prof. Pap. n.1253, p.12, pl.10, f.1.

Late Cretaceous, Dakota Fm. Basal part of Graneros Shale in the Sioux City Brick and Tile Company's claypit, North Riverside, Woodbury, Iowa, USA.

***Eccyliopterus?* sp.**

HYPOTYPE YPM 17284

Miller, A.K. and W. Youngquist. 1947b. J. Paleont. v.21, n.1, p.9.

Late Ordovician. NW shore, Olusaktuk, King's Harbor, Prince Albert Sound, Victoria Island, Canada. Collector: Cloud, P.E., 9/3/1939.

***Emperoceras beecheri* Hyatt**

SYNTYPE YPM 6131A[a]

Hyatt, A. 1894. Proc. Am. Phil. Soc. v.32, n.143, p.575, pl.14, f.15,16.

SYNTYPE YPM 6131B[a]

Hyatt, A. 1894. Proc. Am. Phil. Soc. v.32, n.143, p.575, pl.14, f.17.

Late Cretaceous, Fort Pierre Grp, Pierre Shale. 8 mi SE of Buffalo Gap, Custer Co., South Dakota, USA. Collector: Yale Hatcher Cretaceous Expedition, 1891.

[a]This includes one specimen and two casts.

***Eoaraxoceras ruzhencevi* Spinosa, Furnish and Glenister**
See *Kingoceras kingi* Miller.

***Eoasianites deciensis* (Plummer and Scott)**

HYPOTYPE YPM 16788

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.79, tf.20A, pl.13, f.4,5.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, Zone of *Uddenites*, Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Eoasianites modestus* (Böse)**

HYPOTYPE YPM 15939

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.80, tf.20B, pl.12, f.5.

Early Permian, Wolfcampian, Wolfcamp Fm. Upper Wolfcamp, 2.75 mi N of Decie Ranch, Brewster Co., Texas, USA. Collector: Baker, C.L.

HYPOTYPE YPM 16789

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.80, tf.20C, pl.12, f.6-9.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, Zone of *Uddenites*, 5 mi NE of Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Eothalassoceras keytei* (Smith)**

HYPOTYPE YPM 16787

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.105, pl.6, f.8.

Early Permian, Wolfcampian, Wolfcamp Fm. *Uddenites* bed, about 0.5 mi W of Peabody Locality B3119, below hill 4815, and NW of Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Eothinites hessensis* Miller and Furnish**

SYNTYPE YPM 16782A

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.102, pl.11, f.3.

SYNTYPE YPM 16782B[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.102, pl.11, f.4.

SYNTYPE YPM 16783A, 16783B

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.102.

Early Permian, Leonardian, Hess Limestone. Uppermost Hess, 1.1 mi SW of Word Ranch house, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

***Epithalassoceras ruzencevi* Miller and Furnish**

HOLOTYPE YPM 16303

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.105, f27D.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.95, f.10D,11A,C,12, pl.37, f.1,2.

Late Permian. Beds 5, 6 and 7 of Malascachas section, area 1200 m S17W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Eulophoceras natalense* Hyatt**

HOLOTYPE YPM 956

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.86, pl.11, f.2-6.

Late Cretaceous. Port Natal [probably Umzamba beds at mouth of Umzamba River at the Natal/ Transkei border], South Africa.

***Exiteloceras oronense* (Lewy)**

HYPOTYPE YPM 68

Cobban, W.A. 1974. U.S. Geol. Surv. Prof. Pap. n.845, p.15, pl.10, f.33-35.

Late Cretaceous, Monmouth Grp, Navesink Fm. Atlantic Highlands, Monmouth Co., New Jersey, USA.

***Gastrioceras angusticameratum* Miller**
See *Gastrioceras* sp.

***Gastrioceras bakeri* Miller**
See *Gastrioceras* sp.

***Gastrioceras drakei* Miller**
See *Gastrioceras* sp.

***Gastrioceras gaptankense* Miller**

HOLOTYPE YPM 12933A

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.401, pl.38, f.15-17.

=*Preshumardites gaptankensis*. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.291, pl.24, f.6.[a]

PARATYPE YPM 12933B

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.401.

=*Preshumardites gaptankensis*. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.291.[b]

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S, 15 E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

PARATYPE YPM 12944

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.401.

=*Preshumardites gaptankensis*. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.291.[b]

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 2.5 mi S of Arnold Ranch, below Dugout Creek overthrust, N side of hill, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

[a]Cited as a cotype on p.292, but designated the holotype in Miller (1930, p.402).

[b]Cited as a cotype on p.292, but designated a paratype in Miller (1930, p.402).

***Gastrioceras multiseptum* Miller**
See *Gastrioceras* sp.

***Gastrioceras paucireticulatum* Miller**
See *Gastrioceras* sp.

***Gastrioceras* sp.**

HYPOTYPE YPM 13088

Böse, E. 1920. Am. J. Sci. v.199, p.58.

=*Gastrioceras angusticameratum* Miller. HOLOTYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.85, pl.13, f.21-23.

HYPOTYPE YPM 13089

Böse, E. 1920. Am. J. Sci. v.199, p.57.

=*Gastrioceras bakeri* Miller. HOLOTYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.87, pl.13, f.15-17.

HYPOTYPE YPM 13090, 14096–14122

Böse, E. 1920. Am. J. Sci. v.199, p.57.

=*Gastrioceras bakeri* Miller. PARATYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.87.

HYPOTYPE YPM 13091

Böse, E. 1920. Am. J. Sci. v.199, p.56.

=*Gastrioceras drakei* Miller. HOLOTYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.89, pl.13, f.12-14.

HYPOTYPE YPM 13092

Böse, E. 1920. Am. J. Sci. v.199, p.56.

=*Gastrioceras drakei* Miller. PARATYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.89.

HYPOTYPE YPM 13093

Böse, E. 1920. Am. J. Sci. v.199, p.58.

=*Gastrioceras multiseptum* Miller. HOLOTYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.90, pl.13, f.9,10.

HYPOTYPE YPM 13094

Böse, E. 1920. Am. J. Sci. v.199, p.58.

=*Gastrioceras multiseptum* Miller. PARATYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.90, pl.13, f.11.

HYPOTYPE YPM 13095

Böse, E. 1920. Am. J. Sci. v.199, p.58.

=*Gastrioceras paucireticulatum* Miller. HOLOTYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.92, pl.13, f.1,2.

HYPOTYPE YPM 13096, 14126

Böse, E. 1920. Am. J. Sci. v.199, p.58.

=*Gastrioceras paucireticulatum* Miller. PARATYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.92.

HYPOTYPE YPM 14123

Böse, E. 1920. Am. J. Sci. v.199, p.57.

=*Gastrioceras drakei* Miller. PARATYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.89.

HYPOTYPE YPM 14124, 14125

Böse, E. 1920. Am. J. Sci. v.199, p.56.

=*Gastrioceras drakei* Miller. PARATYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.89.

Early Permian, Bursum Fm. Clay pits, 1.25 mi E of Tularosa on US Hwy 70, CENTER SW1/4sec21T14SR10E, Otero Co., New Mexico, USA. Collector: Baker, C.L. and Drake, N.F.

***Gastrioceras subtilicostatum* Böse**

SYNTYPE YPM 13087, 14059–14094

Böse, E. 1920. Am. J. Sci. v.199, p.54.

Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.83.

Early Permian, Bursum Fm. Clay pits, 1.25 mi E of Tularosa on US Hwy 70, CENTER SW1/ 4sec21T14SR10E, Otero Co., New Mexico, USA. Collector: Baker, C.L. and Drake, N.F.

***Goniolobocerasdiscoidale* Böse**

SYNTYPE YPM 13081

Böse, E. 1920. Am. J. Sci. v.199, p.52.

=*Milleroceras minusculum* Miller. HOLOTYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.73, pl.12, f.8-10.

=*Mescalites discoidalis*. PARALECTOTYPE. Furnish, W.M. and B.F. Glenister. 1971. Smith. Contrib. Paleobio. n.3, p.306.

SYNTYPE YPM 13082

Böse, E. 1920. Am. J. Sci. v.199, p.52.

=*Milleroceras minusculum* Miller. PARATYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.73, pl.12, f.11.

=*Mescalites discoidalis*. PARALECTOTYPE. Furnish, W.M. and B.F. Glenister. 1971. Smith. Contrib. Paleobio. n.3, p.306.

SYNTYPE YPM 13083, 14022–14039

Böse, E. 1920. Am. J. Sci. v.199, p.52.

=*Milleroceras minusculum* Miller. PARATYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.73.

=*Mescalites discoidalis*. PARALECTOTYPE. Furnish, W.M. and B.F. Glenister. 1971. Smith. Contrib. Paleobio. n.3, p.306.

SYNTYPE YPM 13084

Böse, E. 1920. Am. J. Sci. v.199, p.52.

=*Gurleyoceras discoidale*. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.77, pl.12, f.14-16.

=*Mescalites discoidalis*. LECTOTYPE. Furnish, W.M. and B.F. Glenister. 1971. Smith. Contrib. Paleobio. n.3, p.306.

SYNTYPE YPM 14040, 14049–14058

Böse, E. 1920. Am. J. Sci. v.199, p.52.

=*Gurleyoceras discoidale*. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.77.

=*Mescalites discoidalis*. PARALECTOTYPE. Furnish, W.M. and B.F. Glenister. 1971. Smith. Contrib. Paleobio. n.3, p.306.

Early Permian, Bursum Fm. Clay pits, 1.25 mi E of Tularosa on US Hwy 70, CENTER SW1/ 4sec21T14SR10E, Otero Co., New Mexico, USA. Collector: Baker, C.L. and Drake, N.F.

***Goniolobocerasdiscoidale* (Böse)**
See *Goniolobocerasdiscoidale* Böse.

***Hamites* sp.**

HYPOTYPE YPM 6382

Landman, N.H. 1984. Natural History v.93, n.8, p.34.

Cretaceous. Lower California, Mexico.

***Hammatoceras cappucinum* Buckman**

PARATYPE YPM 6256

Buckman, S.S. 1921. S.S. Buckman: London (England) v.3, pl.206B, f.1,2.

Early Jurassic, Toarcian. Cole Station, Somerset, England, United Kingdom.

***Goniolobocerasdiscoidale*? sp.**

HYPOTYPE YPM 13085, 14041–14048

Böse, E. 1920. Am. J. Sci. v.199, p.58.

=*Wiedeyoceras nodomarginatum* Miller. SYNTYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.80.

=*Mescalites discoidalis* (Böse). HYPOTYPE. Furnish, W.M. and B.F. Glenister. 1971. Smith. Contrib. Paleobio. n.3, p.306.

HYPOTYPE YPM 13086

Böse, E. 1920. Am. J. Sci. v.199, p.58.

=*Wiedeyoceras lineolatum* Miller. HOLOTYPE. Miller, A.K. 1932a. J. Paleont. v.6, n.1, p.82, pl.13, f.3-5.

=*Mescalites discoidalis* (Böse). HYPOTYPE. Furnish, W.M. and B.F. Glenister. 1971. Smith. Contrib. Paleobio. n.3, p.306.

Early Permian, Bursum Fm. Clay pits, 1.25 mi E of Tularosa on US Hwy 70, CENTER SW1/ 4sec21T14SR10E, Otero Co., New Mexico, USA. Collector: Baker, C.L. and Drake, N.F.

Haresiceras placentiforme Reeside

HYPOTYPE YPM 34699

Hicks, J.F., J.D. Obradovich and L. Tauxe. 1995. J. Geol. v.103, p.246.

Late Cretaceous, Telegraph Creek Fm, Elk Basin Sandstone Mbr, *Scaphites hippocrepsis* 1 Zone. Top surface of uppermost unit of Elk Basin, N-S butte top ridge, E side of basinal cove of anticline, 0.5-0.7 mi due N of Elk Basin Village (abandoned), Elk Basin, Elk Basin Quad., straddles Range line E SIDE SE NE NE sec24T58NR100W, straddles Range line W SIDE SW NW NW sec19T58NR99W, SE SE SE sec35T9SR100W, Carbon Co., Montana, USA. Collector: Hicks, J.F., 1992.

Helicoceras stevensoni Whitfield

HYPOTYPE YPM 6091

Hyatt, A. 1894. Proc. Am. Phil. Soc. v.32, n.143, p.568.

Late Cretaceous, Pierre Shale. Probably Pierre Shale, Boulder, Boulder Co., Colorado, USA. Collector: Hanus, P.H.

Hoploscaphites birkelundi Landman and Waage

HOLOTYPE YPM 27172

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.85G-K,90A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Mostly lower part of massive sand, E-trending bluff, 1.7 mi E of US Rte 85, and 3.2 mi NNE of Redbird, Bowen Flat Quad., SE NE sec11T62WR38N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., White, R.D. and Key, M., 1985.

ALLOTYPE YPM 27210

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.88F-H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Massive sand, NNE-trending ridge 0.1 mi W of US Rte 85, on James Meng Ranch, and from 1.5 mi SW of Redbird, Redbird Quad., CENTER W E sec33T62WR38N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., White, R.D. and Key, M., 1985.

HYPOTYPE YPM 27169

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.86H-K.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Concretions, upper 40 ft of massive sand, ridge 0.2-0.3 mi W of US Rte 85, mostly on Wasserberger Ranch, and 3.7-4.7 mi WSW of Redbird, from S NE SE sec8 to CENTER sec17T37NR62W, Redbird Quad., E SE sec8T62WR37N, NE sec17T62WR37N, SE SE NW sec17T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Hickey, L.J., Price, M. and Harris, F., 1961.

HYPOTYPE YPM 27170

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.85A-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Zone of large jacketed concretions about 30 ft below top of massive sand, Schoolhouse draw, along ridge of Fox Hills Fm 0.3-0.8 mi W of US Rte 85 along N side of road W to Wasserberger Ranch, and 5 mi SSW of Redbird, from CENTER NW sec20 to SE CORNER sec18T37NR62W, Redbird Quad., NW NW sec20T62WR37N, NE CORNER sec19T62WR37N, SE CORNER sec18T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Hickey, L.J., Price, M. and Harris, F., 1961.

HYPOTYPE YPM 27177

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.87A-C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Exposures in and in side gulleys of NW-flowing tributary of Spring Creek, SE of stock pond, and1 mi NE of Wasserberger Ranch house, and 5 mi SW of Redbird, Redbird Quad., NE CORNER sec13T63WR37N, S SE sec12T63WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., White, R.D. and Key, M., 1985.

HYPOTYPE YPM 27179

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.87D,E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Concretions in upper 40 ft of massive sand, along ridge "N", N between Schoolhouse draw and draw marking the S limit of Peabody Locality C0607, 5 mi W of and parallel to US Rte 85, and 5 mi SSW of Redbird, from SW CORNER to NE CORNER SW sec17T37NR62W, Redbird Quad., SW sec17T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., MacClintock, C., Hickey, L.J., Price, M. and Harris, F., 1955 to 1961.

HYPOTYPE YPM 27180

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.86E-G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. All fossiliferous horizons, walls and side gulleys of NW-flowing tributary of Spring Creek, 0.75 mi NE of Wasserberger Ranch house, and 5.5 mi SW of Redbird, from NW CORNER to SE CORNER NE sec13T37NR63W, Redbird Quad., NE sec13T63WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., Wright, S. and Kurtz, J., 1983.

HYPOTYPE YPM 27181

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.85F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Throughout massive sand, bluffs 0.2 mi N of E-W road to Wasserberger Ranch house beginning 0.2 mi W of draw that crosses road 1.3 mi W of US Rte 85, and extending E for 0.6 mi, and 1.25-1.75 mi E of Wasserberger Ranch house, and 5.5 mi SSW of Redbird, from SE SW to W SE SE sec18T37NR62W, Redbird Quad., S S sec18T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., Wright, S. and Kurtz, J., 1983.

HYPOTYPE YPM 27207

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.88I,M,N.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Concretions in upper 40 ft of massive sand, along ridge "N", N between Schoolhouse draw and draw marking the S limit of Peabody Locality C0607, 5 mi W of and parallel to US Rte 85, and 5 mi SSW of Redbird, from SW CORNER to NE CORNER SW sec17T37NR62W, Redbird Quad., SW sec17T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., MacClintock, C., Hickey, L.J., Price, M. and Harris, F., 1955 to 1961.

HYPOTYPE YPM 27208

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.88J-L.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. From below ledge-forming concretionary layer in lower part of massive sand, walls, heads and side gullies of NW-flowing tributary of Spring Creek, 1.25 mi NE of Wasserberger Ranch house, and 5 mi SW of Redbird, from SW NE SE to NE NW SE sec12T37NR63W, Redbird Quad., N SE sec12T63WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., White, R.D. and Key, M., 1985.

HYPOTYPE YPM 27209

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.88A-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Chiefly from upper part of massive sand exposed in gullies on dip slope, W side of ridge, prominent N-S ridge, 0.1-0.5 mi N of Brewster Draw, and 1.4 mi E of US Rte 85, and 2.5 mi NNE of Redbird, Redbird Quad., NW NE sec14T62WR38N, SW SE sec11T62WR38N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., Wright, S. and Kurtz, J., 1983.

HYPOTYPE YPM 27211

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.87F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Mostly lower part of massive sand, E-trending bluff, 1.7 mi E of US Rte 85, and 3.2 mi NNE of Redbird, Bowen Flat Quad., SE NE sec11T62WR38N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., White, R.D. and Key, M., 1985.

HYPOTYPE YPM 27218

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.87G-I.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Throughout massive sand, bluffs 0.2 mi N of E-W road to Wasserberger Ranch house beginning 0.2 mi W of draw that crosses road 1.3 mi W of US Rte 85, and extending E for 0.6 mi, and 1.25-1.75 mi E of Wasserberger Ranch house, and 5.5 mi SSW of Redbird, from SE SW to W SE SE sec18T37NR62W, Redbird Quad., S S sec18T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., Wright, S. and Kurtz, J., 1983.

HYPOTYPE YPM 27220

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.90D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Concretions in upper 40 ft of massive sand, along ridge "N", N between Schoolhouse draw and draw marking the S limit of Peabody Locality C0607, 5 mi W of

and parallel to US Rte 85, and 5 mi SSW of Redbird, from SW CORNER to NE CORNER SW sec17T37NR62W, Redbird Quad., SW sec17T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., MacClintock, C., Hickey, L.J., Price, M. and Harris, F., 1955 to 1961.

HYPOTYPE YPM 34698

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.119, tf.90B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Throughout massive sand, bluffs 0.2 mi N of E-W road to Wasserberger Ranch house beginning 0.2 mi W of draw that crosses road 1.3 mi W of US Rte 85, and extending E for 0.6 mi, and 1.25-1.75 mi E of Wasserberger Ranch house, and 5.5 mi SSW of Redbird, from SE SW to W SE SE sec18T37NR62W, Redbird Quad., S S sec18T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., Wright, S. and Kurtz, J., 1983.

Hoploscaphites cheyennensis (Owen)

HYPOTYPE YPM 23689

Landman, N.H. and K.M. Waage. 1986. Lethaia v.19, p.218, f.5a.

=*Jeletzkytes nebrascensis* (Owen). HYPOTYPE. Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. 1.5 ft above barren layer in POAZ, SW side of SE-trending spur paralleling and just W of SD Rte 63, and between 0.3 and 0.5 mi S of Peabody Locality C0030, and 2.6 mi SSE SE of O'Leary Ranch house, and about 1 mi N of Moreau River, and 3.6 mi NNE of Green Grass, Parade NW Quad., CENTER N EDGE SW SW sec32T15NR24E, SW NW SW sec32T15NR24E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27090

Landman, N.H. and K.M. Waage. 1986. Lethaia v.19, p.218, f.5b.

=*Jeletzkytes nebrascensis* (Owen). HYPOTYPE. Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

Hoploscaphites comprimus (Owen)

ALLOTYPE YPM 27240

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.73E-I.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, concretions, *linguiformis* concretions with small *Cuculaea* concretions in or a few feet below them, exposures on NW-facing bluff and spurs below it, overlooking Moreau River, and 1.5-2 mi SW of Green Grass, Lantry NE Quad., E NE sec27T14NR23E, NW CORNER sec26T14NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1962.

HYPOTYPE YPM 23046[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.81.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, concretions in gravel pit on S side of Moreau River just NW of SD Rte 65, and 6.8 mi E of Thunder Butte Village, Dupree NE Quad., NW CORNER SE sec3T14NR21E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 23057

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, app.2.7.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Includes CAZ and *Sphenodiscus* Layer, all collections from float and in sand banks of roadcut of abandoned US Rte 12, RR cut and spillway of Lantry Dam, 1.5 mi WNW of Lantry, Lantry Quad., CENTER SW SW sec4T12NR22E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1940 to 1962.

HYPOTYPE YPM 23058[b]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.77(left), app.2.8.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with

US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 23059

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, app.2.9.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr, *Cucullaea* Assemblage Zone. Many concretions, cut on abandoned county road at top of rise 0.1 mi N of Meadow Creek, and 0.7 mi SW of Peach Lake, and 9.7 mi S of Firesteel, Peach Lake Quad., along middle part of section line W EDGE SW sec4T15NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 23060

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, app.2.10.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies. Float, several horizons, POAZ to top of TCM, top knob on end of SE-trending spur, and 6 mi NW of Whitehorse, Whitehorse Quad., SE NW NW sec30T16NR26E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 23741

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.70F,70K,76A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr, *Cucullaea* Assemblage Zone. Concretion, cut on abandoned county road at top of rise 0.1 mi N of Meadow Creek, and 0.7 mi SW of Peach Lake, and 9.7 mi S of Firesteel, Peach Lake Quad., along middle part of section line W EDGE SW sec4T15NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 23744

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.76B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, from butte and small prominences and bluffs to S and near road, SW slope of prominent butte on divide between Red Earth Creek and Meadow Creek, 4.5 mi NNW of Green Grass, Lantry NE Quad., E NE SW sec27T15NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 27066

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.72A-C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, grass-covered bluffs on E and SE side of SD Rte 65, and on E and W sides of draw, 1 mi N of Moreau River, Lantry NW Quad., NE SW sec36T15NR21E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M. and Colton, G., 1951.

HYPOTYPE YPM 27146

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.74E-I.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 27228

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.71F-J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr, *Sphenodiscus* Layer. Float, concretion, SW-facing exposures on ridge extending NW from bluffs on Timber Lake Mbr, and about 0.5 mi W of Peabody Locality C0089, and 2.5 mi WSW of Green Grass, Lantry NE Quad., NE SE sec21T14NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1962.

HYPOTYPE YPM 27229

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.70G-J.

HYPOTYPE YPM 27230

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.70C-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 27231

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.72D-H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, roadcuts along SD Rte 63 about 3.5 mi N of Moreau River bridge, and 5 mi NNE of Green Grass, Parade NW Quad., section line NE sec30T15NR24E, section line NW sec29T15NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1940.

HYPOTYPE YPM 27232

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.71A-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, from butte and small prominences and bluffs to S and near road, SW slope of prominent butte on divide between Red Earth Creek and Meadow Creek, 4.5 mi NNW of Green Grass, Lantry NE Quad., E NE SW sec27T15NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 27233

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.69F-I.

HYPOTYPE YPM 27234

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.73A-D.

HYPOTYPE YPM 27239

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.73J-L.

HYPOTYPE YPM 27241

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.74A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 27242

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.72I.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr, *Sphenodiscus* Layer. Exposures on NW-facing bluff and spurs below it, overlooking Moreau River, and 1.5-2 mi SW of Green Grass, Lantry NE Quad., E NE sec27T14NR23E, NW CORNER sec26T14NR23E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 34696

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.76C.

HYPOTYPE YPM 34697

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.100, tf.76D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr, *Cucullaea* Assemblage Zone. Measured section, unit 8, SW slope of prominent butte on divide between Red Earth Creek and Meadow Creek, 4.5 mi NNW of Green Grass, Lantry NE Quad., CENTER NE SW sec27T15NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

[a]This specimen was dissected by N.H. Landman to expose the inner whorls.

[b]This specimen was sawed along the dorsal-ventral axis by N.H. Landman.

Hoploscaphites melloi Landman and Waage

HOLOTYPE YPM 23044

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.82A-C.

HYPOTYPE YPM 23042

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.83D,E.

HYPOTYPE YPM 23043

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.82D,E.

HYPOTYPE YPM 23066

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.83A.

HYPOTYPE YPM 23067

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.83B,C.

HYPOTYPE YPM 23068

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.83F.

HYPOTYPE YPM 23070

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.84A.

HYPOTYPE YPM 23071

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.82F-H.

Late Cretaceous, Maastrichtian, Montana Grp, Pierre Shale, Mobridge Mbr. Upper Mobridge, limestone concretion layers below upper bentonite, NW-facing bluff S of Moreau River, 0.2 mi SW of SD Rte 63, and 2 mi NE of Green Grass, Parade NW Quad., N SE SE sec7T14NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., Speden, I.G. and Mello, J.F., 1940 to 1960.

HYPOTYPE YPM 23072

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.84B.

Late Cretaceous, Maastrichtian, Montana Grp, Pierre Shale, Mobridge Mbr. Float in upper Mobridge, NW-facing bluff S of Moreau River, 0.2 mi SW of SD Rte 63, and 2 mi NE of Green Grass, Parade NW Quad., N SE SE sec7T14NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1940.

HYPOTYPE YPM 23074

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.83G-I.

HYPOTYPE YPM 23077

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.112, tf.83J.

Late Cretaceous, Maastrichtian, Montana Grp, Pierre Shale, Mobridge Mbr. Upper Mobridge, limestone concretion layers below upper bentonite, NW-facing bluff S of Moreau River, 0.2 mi SW of SD Rte 63, and 2 mi NE of Green Grass, Parade NW Quad., N SE SE sec7T14NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., Speden, I.G. and Mello, J.F., 1940 to 1960.

Hoploscaphites nebrascensis (Owen)

HYPOTYPE YPM 27157

Landman, N.H. and K.M. Waage. 1986. Lethaia v.19, p.218, f.6.

=*Jeletzkytes spedeni* Landman and Waage. HYPOTYPE. Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129.

=*Jeletzkytes nebrascensis* (Owen). Hengsbach, R. 1996. Top. Geobio. v.13, p.592, f.2.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion, 6 ft below *Limopsis* Layer, W end of SW-facing bluff of high knob in ridge, S of trail, Whitehorse Ridge, and 4.5 mi NW of Whitehorse, Whitehorse Quad., SE CORNER NW sec28T16NR26E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

Hoploscaphites nicolleti (Morton)

HYPOTYPE YPM 23767

Landman, N.H. and K.M. Waage. 1986. Lethaia v.19, p.215, f.3.

=*Hoploscaphites nicolletii*. Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73.

Checa, A.G. and J.M. Garcia-Ruiz. 1996. Top. Geobio. v.13, p.287, f.13.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 1, 11-13 ft below base of unit A in measured section, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M. and Biscaye, P.E., 1957.

HYPOTYPE YPM 23768

Landman, N.H. and K.M. Waage. 1986. Lethaia v.19, tf.4A.

=*Hoploscaphites nicolletii*. Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73.

HYPOTYPE YPM 23769

Landman, N.H. and K.M. Waage. 1986. Lethaia v.19, p.216, f.4b.

=*Hoploscaphites nicolletii*. Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 1, cut on E side of second roadcut N of Little Eagle on McLaughlin-Little Eagle Road, and 3.3 mi N of Little Eagle, Little Eagle Quad., CENTER E SE sec5T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Barker, D., 1956.

HYPOTYPE YPM 23770

Landman, N.H. and K.M. Waage. 1986. Lethaia v.19, p.216, f.4c.

=*Hoploscaphites nicolletii.* Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Float, concretion, butte-like toe of SE-trending spur and adjoining outcrops and float areas, "Happy Hill," SE of Bench Mark Church, and about 6 mi WSW of Little Eagle, Little Eagle NW Quad., SW sec26T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23771

Landman, N.H. and K.M. Waage. 1986. Lethaia v.19, p.216, f.4d.

=*Hoploscaphites nicolletii.* Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Float, concretion 1, face and outcrops at 2 separate sites around S end of SSE-trending ridge at SW corner of Long's Ridge, and 7.3 mi W of Whitehorse, Little Moreau Lake Quad., SW NE SE SE sec15T15NR25E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

Hoploscaphites nicolletii (Morton)

NEOTYPE YPM 27222[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.48A-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. SW-facing bluffs of SE-trending spur that joins terrace to S and SE, 2 mi WNW of Little Eagle, Little Eagle Quad., E SE SW sec18T20NR27E, NW NE NE sec19T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

ALLOTYPE YPM 27235

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.52H-L., frtp.14.[b]

Davis, R.A., N.H. Landman, J.L. Dommergues, D. Marchand and H. Bucher. 1996. Top. Geobio. v.13, p.506, f.9J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 2, in place in slumped face, faces 0.3 mi S of Peabody Locality C0120, and 1 mi SE of High Bank Creek, and 5.8 mi SW of Little Eagle, Little Eagle SW Quad., NE CORNER SE NE sec15T19NR26E, Corson Co., South Dakota, USA. Collector: Speden, I.G., 1963.

HYPOTYPE YPM 23041

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.50E-H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Western of 3 exposures aligned E-W, on N-facing toes of spurs at head of tributary to Little Oak Creek, and 4 mi SSW of Little Eagle, Little Eagle SE Quad., CENTER NE SW sec7T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23053[c]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.63(left), app.2.3.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 2, 11-13 ft below base of unit A (peanut brittle), bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M. and Hilgeford, P., 1957.

HYPOTYPE YPM 23054

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, app.2.1.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 1, 11-13 ft below base of unit A in measured section, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M. and Biscaye, P.E., 1957.

HYPOTYPE YPM 23055

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, app.2.2.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretions, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE

sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Mackenzie, C., 1939.

HYPOTYPE YPM 23056

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, app.2.4.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies. Float in lower Trail City, most but not all from LNAZ (some from LGAZ), bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M. and Barker, D., 1956.

HYPOTYPE YPM 23064

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, app.2.20.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Irish Creek Lithofacies, *Cucullaea* Assemblage Zone. WSW-facing bluff on N side of Moreau River about 2 mi E of Thunder Butte Bridge, and 3.5 mi ENE of Thunder Butte Village, Dupree NE Quad., Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1961.

HYPOTYPE YPM 23213

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.41B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 3, 7.5 ft below *Limopsis* Layer, in face on SW side of slump block 300 ft SSW of Peabody Locality C0066, Whitehorse Ridge, and 6 mi NW of Whitehorse, Whitehorse Quad., SE NW sec30T16NR26E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 23707

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.53A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. 3 concretions, chiefly NE side of narrow gully at SW end of Waage Locality 52, 3 mi SSW of Little Eagle, and 0.5 mi W of SD Rte 63, Little Eagle Quad., NW NE NW sec8T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23740

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.49A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 3, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M., 1941.

HYPOTYPE YPM 23742

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.53E, F,61C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, *Limopsis-Gervillia* concretions undifferentiated, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 23751

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.62.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 3, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M., 1941.

HYPOTYPE YPM 27144

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.56A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27221

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.48J,K.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Concretions, section A, 5.5 ft above base of unit 6, lot 3, exposure at toe at W

end of spur, on E side of E tributary of Little Oak Creek, and 4 mi SSW of Little Eagle, Little Eagle Quad., SW SE NE sec7T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27223

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.52A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Western of 3 exposures aligned E-W, on N-facing toes of spurs at head of tributary to Little Oak Creek, and 4 mi SSW of Little Eagle, Little Eagle SE Quad., CENTER NE SW sec7T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27224

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.48L-P.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 1, 11-13 ft below base of unit A in measured section, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M. and Biscaye, P.E., 1957.

HYPOTYPE YPM 27225

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.51F,G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 3, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M., 1941.

HYPOTYPE YPM 27226

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.49E-G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretions, road gutter and old cut on McLaughlin-Little Eagle Road ("roller-coaster road") on small hill about 4 mi S of Little Eagle, Little Eagle SE Quad., along section line N half of W EDGE SW SW sec9T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 27227

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.54.

Late Cretaceous, Maastrichtian, Montana Grp, Pierre Shale, Elk Butte Mbr. Siderite concretions, in place from concretion layers 5-20 ft above river and float from those layers in river bed below, NE-facing cliff on W bank of Moreau River, 1.5 mi due W of SD Rte 65 bridge, and 6.7 mi E of Thunder Butte Village, Dupree NE Quad., CENTER E NE NW sec3T14NR21E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., White, R.D. and Ross, H., 1985.

HYPOTYPE YPM 27236

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.56E-G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Float accumulation from road widening and grading, concretions, road gutter and new (1964) cut on McLaughlin-Little Eagle Road ("roller-coaster road") on small hill about 4 mi S of Little Eagle, Little Eagle SE Quad., along section line S half of W EDGE SW SW sec9T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 27237

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.55F-H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, *Gervillia* concretion, concretion 3, small isolated slump block, 0.2 mi SW of prairie trail, and 450 ft W of Peabody Locality C0240, Long's Ridge, and 6.9 mi W of Whitehorse, Little Moreau Lake Quad., NW NE NE SW sec14T15NR25E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27238

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.55A-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Several concretions all form 1 exposure, questionably in place, small outcrops on shoulders of spurs E and W of main gully draining SW 1/4 of section 24, and 9 mi W of Little Eagle, Little Eagle NW Quad., CENTER E SW sec24T20NR25E, CENTER W SW

sec24T20NR25E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1962.

HYPOTYPE YPM 27244

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.51A-C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Float concretions, concretion A, creek bottom below cut banks along Little Oak Creek, Bieber Ranch, and 7 mi SSW of Little Eagle, Little Eagle SE Quad., NE CORNER SW SE sec30T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1961 to 1962.

HYPOTYPE YPM 27245[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.52E-G.

Davis, R.A., N.H. Landman, J.L. Dommergues, D. Marchand and H. Bucher. 1996. Top. Geobio. v.13, p.506, f.9I.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 3, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M., 1941.

HYPOTYPE YPM 27246

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.51H,J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. SW-facing bluffs of SE-trending spur that joins terrace to S and SE, 2 mi WNW of Little Eagle, Little Eagle Quad., E SE SW sec18T20NR27E, NW NE NE sec19T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27247

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.50A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Concretions, top of unit 3 of section 2, SW-facing bluffs at W end of divide, W of trail, and about 1 mi E of Grand River, and 6 mi SE of Bullhead, Miscol NE Quad., CENTER E SE sec15T20NR25E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27248[d]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.51D,E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Scattered poor exposures for 0.4 mi along trail on spur leading NNE from SD Rte 63, and 4 mi ESE of Green Grass, Parade NW Quad., CENTER N SW sec27T14NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1961.

HYPOTYPE YPM 27250

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.48Q.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 1, 11-13 ft below base of unit A in measured section, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M. and Biscaye, P.E., 1957.

HYPOTYPE YPM 30648[e]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.67(left).

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion, about 2.3 ft above contact with Elk Butte Mbr of Pierre, small NE-facing bluff, 0.5 mi W of road, and 5 mi SW of Little Eagle, Little Eagle SW Quad. and Little Eagle SE Quad., NE CORNER SE SE sec11T19NR26E, SE NE SE sec11T19NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 32337

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.45C,D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion, Waage Locality 4 of new SD Rte 63, new roadcut along rerouted SD Rte 63, 0.1 mi W of "old roller-coaster road," and 0.4 mi NNW of Peabody Locality C0018, and 2.1 mi S of Grand River Bridge, and 3.1 mi S of Little Eagle, Little Eagle Quad., NE NE NE sec8T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1967.

HYPOTYPE YPM 32370[f]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.41C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion, SE side of spur, exposures on small E-trending spur, 1 mi S of Maxon Ranch house, and 2.5 mi NW of Little Eagle, Little Eagle Quad., NE CORNER NW sec18T20NR27E, NW CORNER NE sec18T20NR27E, Corson Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 33189

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.24A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretion, exposures on spurs and slump blocks N and NE of bluffs on Timber Lake Mbr, and about 0.5 mi NW of Peabody Locality C0088, and 2 mi WSW of Green Grass, Lantry NE Quad., SE SW sec22T14NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1962.

HYPOTYPE YPM 34110[g]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.44A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Part of *nicolleti* concretion, cut on E side of second roadcut N of Little Eagle on McLaughlin-Little Eagle Road, and 3.3 mi N of Little Eagle, Little Eagle Quad., CENTER E SE sec5T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 34111[h]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.13A,B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Concretion, about in place, exposures on hill slope immediately E of E abutment of stock dam, about 0.5 mi N of Johnson Brothers Ranch house, and 6 mi S of Little Eagle, Little Eagle SE Quad., NW CORNER NE NW sec29T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 34116[i]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.22E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, and from measured section, *Sphenodiscus* Layer and CAZ, 2 separate places on SW-facing bluffs, on W side of SD Rte 63, SE of O'Leary Ranch house, and about 1 mi N of Moreau River, and 4 mi NNE of Green Grass, Parade NW Quad., NE NE NE sec31T15NR24E, NW NW NW sec32T15NR24E, SE SE SE sec30T15NR24E, SW SW SW sec29T15NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 34118[k]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.44E,F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Part of *nicolleti* concretion, cut on E side of second roadcut N of Little Eagle on McLaughlin-Little Eagle Road, and 3.3 mi N of Little Eagle, Little Eagle Quad., CENTER E SE sec5T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 34119[m]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.17A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretions, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Mackenzie, C., 1939.

HYPOTYPE YPM 34127

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.24D,E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *abyssinus-mandanensis* Biofacies. Float, concretions, on top of cut, roadcut on E side of spur and W side of old US Rte 12 about 0.75 mi S of intersection with Wakpala Road, N side of hill with Ridgeview 1954 benchmark, and 4.5 mi S of Mahto, Wakpala NW Quad., NW SW sec15T20NR28E, SW CORNER NW sec15T20NR28E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Barker, D., 1956.

HYPOTYPE YPM 34692

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.61A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 2, cut on E side of second roadcut N of Little Eagle on McLaughlin-Little Eagle Road, and 3.3 mi N of Little Eagle, Little Eagle Quad., CENTER E SE sec5T20NR27E, Corson Co., South Dakota, USA. Collector: Biscaye, P.E., 1957.

HYPOTYPE YPM 34693

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.61B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 3, bluffs of Beaver Creek and tributaries, Seeman Park, 1 mi SE of Linton, Strasburg Quad., along section line N NE sec20T132NR76W, along section line S SE sec17T132NR76W, Emmons Co., North Dakota, USA. Collector: Waage, K.M., 1941.

HYPOTYPE YPM 34694

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.61D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Concretion, Waage Locality 2 of new SD Rte 63, new roadcut along SD Rte 63 ("old roller-coaster road"), 2.0 mi due N of turnofff to W to Johnson Brothers Ranch, and 4.5 mi S of Little Eagle, Little Eagle SE Quad., center of section line between sec16 and sec17 sec16T19NR27E, center of section line between sec16 and sec17 sec17T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1967.

HYPOTYPE YPM 34695

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, tf.61E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Gervillia* concretions, butte-like toe of SE-trending spur and adjoining outcrops and float areas, "Happy Hill," SE of Bench Mark Church, and about 6 mi WSW of Little Eagle, Little Eagle NW Quad., SW sec26T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 44139

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.73, frtp.8.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Concretion, Waage Locality 2 of new SD Rte 63, new roadcut along SD Rte 63 ("old roller-coaster road"), 2.0 mi due N of turnofff to W to Johnson Brothers Ranch, and 4.5 mi S of Little Eagle, Little Eagle SE Quad., center of section line between sec16 and sec17 sec16T19NR27E, center of section line between sec16 and sec17 sec17T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1967.

See also *Hoploscaphites nicolleti* (Morton).

[a]This includes one specimen and a cast.

[b]Cited as allotype, but not part of the original type series. Landman and Waage (1993) use the term to denote the opposite sex of the neotype.

[c]This specimen was sawed along the dorsal-ventral axis by N.H. Landman.

[d]Included with this specimen is an SEM stub with the ventral muscle attachment area.

[e]This specimen was dissected by N.H. Landman to expose the inner whorls.

[f]The mandible of this specimen is mounted on an SEM stub.

[g]This specimen is an SEM stub with hook-like structures.

[h]This is an ammonitella mounted on an SEM stub.

[j]This is a juvenile specimen mounted on an SEM stub.

[k]This includes one hook-like structure embedded in matrix and one hook-like structure on an SEM stub.

[m]This specimen was dissected by N.H. Landman and a median section was prepared from the inner whorls.

Hoploscaphites? sp.

HYPOTYPE YPM 27166

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.127, tf.91A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. SW-facing bluffs of SE-trending spur that joins terrace to S and SE, 2 mi WNW of Little Eagle, Little Eagle Quad., E SE SW sec18T20NR27E, NW NE NE sec19T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27167

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.127, tf.91E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion 1, NW-trending spur on E side of road, 5 mi SW of Little Eagle, Little Eagle SE Quad., CENTER E NW sec13T19NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 27168

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.127, tf.91F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. *nicolleti* concretion, base, E end of hill, S-facing bluff, S side of trail, about 500-700 ft E along trail from Peabody Locality C0006, Whitehorse Ridge, and 6 mi NW of Whitehorse, Whitehorse Quad., about 300 ft N of CENTER SW sec20T16NR26E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

See also undet. Scaphitidae.

Hunanites siangtanensis Chao

HYPOTYPE YPM 28141

Chao, K.K. 1940. J. Paleont. v.14, n.1, p.72, tbl.(p.73).

Lower Carboniferous. SW of Changlingpu, Siangtan, Hunan, China.

Jeletzkytes dorfi Landman and Waage

HOLOTYPE YPM 23175

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.141A-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Float, concretions, gulleys E of the ridge and N of gap, prominent NE-trending ridge cut by NW flowing tributary of Brewster Draw, 0.7-1 mi E of US Rte 85, and 1.5 mi NNE of Redbird, Redbird Quad., CENTER S SW T62WR38N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M. and Byers, C.W. (II), 1971.

ALLOTYPE YPM 23212

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.144D-H,148D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. All fossiliferous horizons, walls and side gulleys of NW-flowing tributary of Spring Creek, 0.75 mi NE of Wasserberger Ranch house, and 5.5 mi SW of Redbird, from NW CORNER to SE CORNER NE sec13T37NR63W, Redbird Quad., NE sec13T63WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., Wright, S. and Kurtz, J., 1983.

HYPOTYPE YPM 23174

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.143A-C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Persistent concretionary bed at top of unit 4 of massive sand, bluffs 0.2 mi N of E-W road to Wasserberger Ranch house beginning 0.2 mi W of draw that crosses road 1.3 mi W of US Rte 85, and extending E for 0.6 mi, and 1.25-1.75 mi E of Wasserberger Ranch house, and 5.5 mi SSW of Redbird, from SE SW to W SE SE sec18T37NR62W, Redbird Quad., S S sec18T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., Wright, S. and Kurtz, J., 1983.

HYPOTYPE YPM 23176

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.142A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Chiefly from upper part of massive sand exposed in gullies on dip slope, W side of ridge, prominent N-S ridge, 0.1-0.5 mi N of Brewster Draw, and 1.4 mi E of US Rte 85, and 2.5 mi NNE of Redbird, Redbird Quad., NW NE sec14T62WR38N, SW SE sec11T62WR38N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., Wright, S. and Kurtz, J., 1983.

HYPOTYPE YPM 23177

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.143D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Concretions in upper 40 ft of massive sand, along ridge "N", N between Schoolhouse draw and draw marking the S limit of Peabody Locality C0607, 5 mi W of and parallel to US Rte 85, and 5 mi SSW of Redbird, from SW CORNER to NE CORNER SW sec17T37NR62W, Redbird Quad., SW sec17T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., MacClintock, C., Hickey, L.J., Price, M. and Harris, F., 1955 to 1961.

HYPOTYPE YPM 23179

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.148A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Throughout massive sand, bluffs 0.2 mi N of E-W road to Wasserberger Ranch house beginning 0.2 mi W of draw that crosses road 1.3 mi W of US Rte 85, and extending E for 0.6 mi, and 1.25-1.75 mi E of Wasserberger Ranch house, and 5.5 mi SSW of Redbird, from SE SW to W SE SE sec18T37NR62W, Redbird Quad., S S sec18T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., Wright, S. and Kurtz, J., 1983.

HYPOTYPE YPM 23180

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.148B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Concretions, upper 40 ft of massive sand, ridge 0.2-0.3 mi W of US Rte 85, mostly on Wasserberger Ranch, and 3.7-4.7 mi WSW of Redbird, from S NE SE sec8 to CENTER sec17T37NR62W, Redbird Quad., E SE sec8T62WR37N, NE sec17T62WR37N, SE SE NW sec17T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Hickey, L.J., Price, M. and Harris, F., 1961.

HYPOTYPE YPM 23183

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.142E.

HYPOTYPE YPM 23185

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.145A,B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Float, concretions, gulleys E of the ridge and N of gap, prominent NE-trending ridge cut by NW flowing tributary of Brewster Draw, 0.7-1 mi E of US Rte 85, and 1.5 mi NNE of Redbird, Redbird Quad., CENTER S SW T62WR38N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M. and Byers, C.W. (II), 1971.

HYPOTYPE YPM 27212

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.145C-H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Massive sand, NNE-trending ridge 0.1 mi W of US Rte 85, on James Meng Ranch, and from 1.5 mi SW of Redbird, Redbird Quad., CENTER W E sec33T62WR38N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., White, R.D. and Key, M., 1985.

HYPOTYPE YPM 27214

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.148C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Float, concretions, gulleys E of the ridge and N of gap, prominent NE-trending ridge cut by NW flowing tributary of Brewster Draw, 0.7-1 mi E of US Rte 85, and 1.5 mi NNE of Redbird, Redbird Quad., CENTER S SW T62WR38N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M. and Byers, C.W. (II), 1971.

HYPOTYPE YPM 27215

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.144I,J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. W end of ridge N of road from US Rte 85 to Wasserberger Ranch house, and 1.4-1.6 mi W of US Rte 85, and extending E about 0.3 mi from road that forks N to oil wells E of Spring Creek, and 0.9-1.2 mi E of Wasserberger Ranch house, and 6 mi SW of Redbird, Redbird Quad., SW SW sec18T62WR37N, S EDGE NW SW sec18T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Landman, N.H., White, R.D. and Key, M., 1985.

HYPOTYPE YPM 27216

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.184, tf.146H-J.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Massive Marine Sand Lithofacies. Concretions, upper 40 ft of massive sand, ridge 0.2-0.3 mi W of US Rte 85, mostly on Wasserberger Ranch, and 3.7-4.7 mi WSW of Redbird, from S NE SE sec8 to CENTER sec17T37NR62W, Redbird Quad., E SE sec8T62WR37N, NE sec17T62WR37N, SE SE NW sec17T62WR37N, Niobrara Co., Wyoming, USA. Collector: Waage, K.M., Hickey, L.J., Price, M. and Harris, F., 1961.

Jeletzkytes nebrascensis (Owen)

HYPOTYPE YPM 23065

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, app.2.23.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 23144

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.122, frtp.7.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Includes CAZ and *Sphenodiscus* Layer, all collections from float and in sand banks of roadcut of abandoned US Rte 12, RR cut and spillway of Lantry Dam, 1.5 mi WNW of Lantry, Lantry Quad., CENTER SW SW sec4T12NR22E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1940 to 1962.

HYPOTYPE YPM 23145

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.123.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 23146

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.120A-C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, concretions, CAZ and *Sphenodiscus* Layer, top of bluff, S-facing bluffs forming amphitheatre, 1.6 mi N of Moreau River, and 2 mi S of the French Ranch, and 6 mi NW of Green Grass, Lantry NE Quad., N SE SW sec31T15NR23E, SE CORNER NW SW sec31T15NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23147

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.127,128.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Includes CAZ and *Sphenodiscus* Layer, all collections from float and in sand banks of roadcut of abandoned US Rte 12, RR cut and spillway of Lantry Dam, 1.5 mi WNW of Lantry, Lantry Quad., CENTER SW SW sec4T12NR22E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1940 to 1962.

HYPOTYPE YPM 23151

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.126.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, concretion, site B, near top of flat-topped ridge on W side of tributary of Swan Creek, 7 mi S of Moreau River, and 5.5 mi NNE of Ridgeview, Ridgeview NE Quad., E SW SW SE sec14T14NR27E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1963.

HYPOTYPE YPM 23165

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.121A,B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, concretions in gravel pit on S side of Moreau River just NW of SD Rte 65, and 6.8 mi E of Thunder Butte Village, Dupree NE Quad., NW CORNER SE sec3T14NR21E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 23172

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.124.

Late Cretaceous, Maastrichtian, Fox Hills Fm, upper Trail City Mbr, Irish Creek Lithofacies. Float and in place, upper two large concretion layers and beds between (*Sphenodiscus* and CAZ), dissected SW-trending spur, and eastward-extending bluff, N side of Moreau River, and 0.5 mi E of SD Rte 65, and 10 mi NNW of Bear Creek Village, Lantry NW Quad., NE CORNER NE sec1T14NR21E, SE CORNER SE sec36T15NR21E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23195

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.130D-F.

HYPOTYPE YPM 23198

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.130A-C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 23210

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.121C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, upper Trail City Mbr, Irish Creek Lithofacies. Unit 4, 4.5

ft above RB concretions of unit 3, section 1, S-facing bluff, Oliver Jewett Ranch, N side of Moreau River, and 0.5 mi E of SD Rte 65, and 10 mi NNW of Bear Creek Village, Lantry NW Quad., CENTER NE sec1T14NR21E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23215[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.41D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Irish Creek Lithofacies, *Cucullaea* Assemblage Zone. Bluffs S of the Moreau River, between the forks of the county roads leading NW to the village and N to the bridge, and about 1 mi SE of Thunder Butte Village, Thunder Butte Quad., CENTER sec3T14NR20E, E sec3T14NR20E, Ziebach Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 23223[b]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.42C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Concretions, in road and roadcut, ridge-crest exposures along cutoff of secondary road, along top of small, sharp ridge that trends NW-SE from E1/2SW1/4sec32T12NR24E to NW CORNER NE1/4sec5T11NR24E, 3 mi due S of Eagle Butte Village, Herbert Creek Quad., E SW sec32T12NR24E, NW CORNER NE sec5T11NR24E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1957 to 1964.

HYPOTYPE YPM 23687

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.129.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, concretions in gravel pit on S side of Moreau River just NW of SD Rte 65, and 6.8 mi E of Thunder Butte Village, Dupree NE Quad., NW CORNER SE sec3T14NR21E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 23697

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.131A-C, frtp.1.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Includes CAZ and *Sphenodiscus* Layer, all collections from float and in sand banks of roadcut of abandoned US Rte 12, RR cut and spillway of Lantry Dam, 1.5 mi WNW of Lantry, Lantry Quad., CENTER SW SW sec4T12NR22E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1940 to 1962.

HYPOTYPE YPM 23735

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.131D,E,132A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr, *abyssinus-mandanensis* Biofacies. Concretions, just below top of big *Sphenodiscus* layer, top of first prominent spur 0.2 mi NW of S part of Peabody Locality C0088, and 2 mi SW of Green Grass, Lantry NE Quad., CENTER W W NE sec27T14NR23E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27072

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.135C.

HYPOTYPE YPM 27073

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.135B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, from *Sphenodiscus* Layer up through CAZ, roadcut and adjacent outcrops along W side of SD Rte 63, between 5.5 and 6 mi S of intersection with US Rte 212, High Elk Hill, 6 mi SSW of Eagle Butte Village, High Elk Hill Quad., W W SW sec12T11NR23E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1940 to 1941.

HYPOTYPE YPM 27078

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.135A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Includes CAZ and *Sphenodiscus* Layer, all collections from float and in sand banks of roadcut of abandoned US Rte 12, RR cut and spillway of Lantry Dam, 1.5 mi WNW of Lantry, Lantry Quad., CENTER SW SW sec4T12NR22E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1940 to 1962.

HYPOTYPE YPM 27092

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.135D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr, *Cucullaea* Assemblage Zone. Concretion, cut on abandoned county road at top of rise 0.1 mi N of Meadow Creek, and 0.7 mi SW of Peach Lake, and 9.7 mi S of Firesteel, Peach Lake Quad., along middle part of section line W EDGE SW

sec4T15NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 32534

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.26B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, from butte and small prominences and bluffs to S and near road, SW slope of prominent butte on divide between Red Earth Creek and Meadow Creek, 4.5 mi NNW of Green Grass, Lantry NE Quad., E NE SW sec27T15NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 32591[c]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.140(left).

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Irish Creek Lithofacies, *Cucullaea* Assemblage Zone. Concretion 2, bench to S of prominent small butte (hill 2355) that is 0.5 mi SSW of St. Patrick Butte benchmark [also 2355], and 0.5 mi E of Moreau River, Dupree NE Quad., CENTER W EDGE SW NE sec26T15NR21E, E NW sec26T15NR21E, Ziebach Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 32595[d]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.136(left), app.2.22.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, concretions in gravel pit on S side of Moreau River just NW of SD Rte 65, and 6.8 mi E of Thunder Butte Village, Dupree NE Quad., NW CORNER SE sec3T14NR21E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 32597[c]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.140(right).

HYPOTYPE YPM 32599[d]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.136(right), app.2.25.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Irish Creek Lithofacies, *Cucullaea* Assemblage Zone. Concretions, 9-ft zone from top of unit 2 to top of unit 3 of section, bluffs S of the Moreau River, between the forks of the county roads leading NW to the village and N to the bridge, and about 1 mi SE of Thunder Butte Village, Thunder Butte Quad., CENTER SW NE sec3T14NR20E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1961.

HYPOTYPE YPM 32824

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, app.2.21.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float and in place, concretions, CAZ and *Sphenodiscus* Layer, top of bluff, S-facing bluffs forming amphitheatre, 1.6 mi N of Moreau River, and 2 mi S of the French Ranch, and 6 mi NW of Green Grass, Lantry NE Quad., N SE SW sec31T15NR23E, SE CORNER NW SW sec31T15NR23E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 32826

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.26C,D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Irish Creek Lithofacies, *Cucullaea* Assemblage Zone. Concretions, 9-ft zone from top of unit 2 to top of unit 3 of section, bluffs S of the Moreau River, between the forks of the county roads leading NW to the village and N to the bridge, and about 1 mi SE of Thunder Butte Village, Thunder Butte Quad., CENTER SW NE sec3T14NR20E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1961.

HYPOTYPE YPM 33190

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.24B,C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Irish Creek Lithofacies. Timber Lake Mbr or upper Irish Creek Lithofacies of Trail City Mbr, Fox Hills Fm in type area, Dewey Co., Corson Co., and N half of Ziebach Co., Ziebach Co., South Dakota, USA.

HYPOTYPE YPM 34109

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.45A,B,46.[e]

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Irish Creek Lithofacies, *Cucullaea* Assemblage Zone. Concretions, 9-ft zone from top of unit 2 to top of unit 3 of section, bluffs S of the Moreau River, between the forks of the county roads leading NW to the village and N to the bridge, and about 1 mi SE of Thunder Butte Village, Thunder Butte Quad., CENTER SW NE sec3T14NR20E,

Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1961.

HYPOTYPE YPM 34112

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.13C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Float, concretions, S knob, ridge-crest exposures along cutoff of secondary road, along top of small, sharp ridge that trends NW-SE from E1/2SW1/4sec32T12NR24E to NW CORNER NE1/4sec5T11NR24E, 3 mi due S of Eagle Butte Village, Herbert Creek Quad., E SW sec32T12NR24E, NW CORNER NE sec5T11NR24E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., 1964.

CAST OF HYPOTYPE YPM 44518[f]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.161, tf.125.

Late Cretaceous, Maastrichtian, Fox Hills Fm. Long Lake, along Missouri River, Emmons Co., North Dakota, USA.

See also *Discoscaphites nebrascensis* (Owen), *Hoploscaphites cheyennensis* (Owen) and *Hoploscaphites nebrascensis* (Owen).

[a]The mandible of this specimen is mounted on an SEM stub.

[b]This specimen includes one thin section.

[c]This specimen was dissected by N.H. Landman to expose the inner whorls.

[d]This specimen was sawed along the dorsal-ventral axis by N.H. Landman.

[e]16 hooks and 1 mandible all in body chamber.

[f]This is a cast. The original specimen, USNM 398, is at the Smithsonian Institution.

Jeletzkytes spedeni Landman and Waage

HOLOTYPE YPM 27160

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.92,93A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. SW-facing bluffs of SE-trending spur that joins terrace to S and SE, 2 mi WNW of Little Eagle, Little Eagle Quad., E SE SW sec18T20NR27E, NW NE NE sec19T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

ALLOTYPE YPM 23710

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.104,113F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, layered-patchy concretion, outcrops, slumped in part, at toe of spur, S side of Grand River, and 8 mi SE of Little Eagle, Little Eagle SE Quad., E NW SW sec11T19NR27E, Corson Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 23061

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, app.2.13.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions, SW-facing bluffs along divide, 1.3 mi E of Redwater Creek, and about 14 mi N of Parade, Parade NE Quad., SW CORNER sec29T15NR25E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23062[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.114(left), app.2.14.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, *Gervillia* concretion, small slump blocks in lower bluffs on either side of S-draining draw, 0.5 mi due N of Mortonson Ranch house, and 5.5 mi WSW of Little Eagle, Little Eagle NW Quad., E EDGE NE sec33T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1962.

HYPOTYPE YPM 23063

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, app.2.16.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Numerous concretions in concretion layer capping S end of knob, concretion-capped knob just E of Whitehorse-Timber Lake road, and 6 mi NW of Whitehorse, Whitehorse Quad., SW SW NW sec30T16NR26E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 23110

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.93B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, slope near outcrop of POAZ, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 23122

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.98,99.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, slumped about 6 ft, concretion, irregularly shaped spur with narrow SE-trending tip downfaulted so that lower barren concretions cap it, 0.3 mi E of SD Rte 63, SE of O'Leary Ranch house, and about 1 mi N of Moreau River, and 3.8 mi NNE of Green Grass, Parade NW Quad., NE SW SE sec32T15NR24E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 23124

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.95A,B, frtp.9.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float accumulation from road widening and grading, some in place, concretions, road gutter and new (1964) cut on McLaughlin-Little Eagle Road ("roller-coaster road") on small hill about 4 mi S of Little Eagle, Little Eagle SE Quad., along section line S half of W EDGE SW SW sec9T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 23199

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.105A-C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 23200

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.108A-D, frtp.4.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float accumulation from road widening and grading, some in place, concretions, road gutter and new (1964) cut on McLaughlin-Little Eagle Road ("roller-coaster road") on small hill about 4 mi S of Little Eagle, Little Eagle SE Quad., along section line S half of W EDGE SW SW sec9T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 23204

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.106.

HYPOTYPE YPM 23205

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.102.

Late Cretaceous, Maastrichtian, Montana Grp, Pierre Shale, Elk Butte Mbr. Siderite concretions, in place from concretion layers 5-20 ft above river and float from those layers in river bed below, NE-facing cliff on W bank of Moreau River, 1.5 mi due W of SD Rte 65 bridge, and 6.7 mi E of Thunder Butte Village, Dupree NE Quad., CENTER E NE NW sec3T14NR21E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M., White, R.D. and Ross, H., 1985.

HYPOTYPE YPM 23206

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.100A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Drepanochilus* concretions, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Big *Gervillia-Drepanochilus* concretions, part of SW-facing bluff of Whitehorse Ridge extending ESE and bounded on SE by gulch marking ridge break at fault, Whitehorse Ridge, 5-6 mi NW of Whitehorse, Whitehorse Quad., NW CORNER sec28T16NR26E, SE NE SW sec20T16NR26E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Sohl, N., 1959.

HYPOTYPE YPM 23211

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.100B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies. Float, on outcrop and in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 23220

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.38A,B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions 5-9, outcrops around S end of second spur to E of ridge with localities C0242-C0244, about 0.33 mi NE of Peabody Locality C0242, S side of Long's Ridge, and 7.1 mi W of Whitehorse, Little Moreau Lake Quad., SW SW NE SW sec14T15NR25E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 23224

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.41A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretions from measured section, cut on E side of second roadcut N of Little Eagle on McLaughlin-Little Eagle Road, and 3.3 mi N of Little Eagle, Little Eagle Quad., CENTER E SE sec5T20NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 23699

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.107A-C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, small slump blocks in lower bluffs on either side of S-draining draw, 0.5 mi due N of Mortonson Ranch house, and 5.5 mi WSW of Little Eagle, Little Eagle NW Quad., E EDGE N NE sec33T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1962.

HYPOTYPE YPM 23704

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.103D,E.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. SW-facing bluffs of spur trending SE, 3 mi WNW of Little Eagle, Little Eagle Quad., CENTER S line sec13T20NR26E, CENTER NE sec24T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23706

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.108E-H.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Concretions, irregularly shaped spur with narrow SE-trending tip downfaulted so that lower barren concretions cap it, 0.3 mi E of SD Rte 63, SE of O'Leary Ranch house, and about 1 mi N of Moreau River, and 3.8 mi NNE of Green Grass, Parade NW Quad., NE SW SE sec32T15NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 23714

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.109E,110, frtp.13.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions, in river bed, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 23718

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.105D-F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone?. Float, on slope a few ft below LGAZ, exposures on hill slope immediately E of E abutment of stock dam, about 0.5 mi N of Johnson Brothers Ranch house, and 6 mi S of Little Eagle, Little Eagle SE Quad., NW CORNER NE NW sec29T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 23732

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.109A-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone?. Float, concretion, exposures on hill slope immediately E of E abutment of stock dam, about 0.5 mi N of Johnson Brothers Ranch house, and 6 mi S of Little Eagle, Little Eagle SE Quad., NW CORNER NE NW sec29T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 23775

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.100C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti*

Assemblage Zone. Zone above jarosite, exposures on hill slope immediately E of E abutment of stock dam, about 0.5 mi N of Johnson Brothers Ranch house, and 6 mi S of Little Eagle, Little Eagle SE Quad., NW CORNER NE NW sec29T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 23778[b]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.101.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. SW-facing bluffs of spur trending SE, 3 mi WNW of Little Eagle, Little Eagle Quad., CENTER S line sec13T20NR26E, CENTER NE sec24T20NR26E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1959.

HYPOTYPE YPM 24817

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.95C-E,96A.

HYPOTYPE YPM 24819

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.96B-D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Float accumulation from road widening and grading, concretions, road gutter and new (1964) cut on McLaughlin-Little Eagle Road ("roller-coaster road") on small hill about 4 mi S of Little Eagle, Little Eagle SE Quad., along section line S half of W EDGE SW SW sec9T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 27091

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.113G.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretion, on S side of creek about 200 ft W of Strong's stock dam, 0.5 mi ESE of Paul Strong Ranch house, S of Moreau River, and 5.5 mi N of Parade, Parade Quad., NW CORNER NW SW sec8T13NR25E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Larson, N., 6/8/1981.

HYPOTYPE YPM 27151

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.113C.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Gervillia* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. *Gervillia* concretions, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 27152

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.113D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Float, concretions, face on W side of SSE-trending spur, 600 ft NNW of Peabody Locality C0236, and 1.2 mi W of E end of Long's Ridge, Long's Ridge, and 6.1 mi W of Whitehorse, Little Moreau Lake Quad., SW CORNER SW NE SW sec13T15NR25E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

HYPOTYPE YPM 27153

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.113B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Scattered poor exposures for 0.4 mi along trail on spur leading NNE from SD Rte 63, and 4 mi ESE of Green Grass, Parade NW Quad., CENTER N SW sec27T14NR24E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1961.

HYPOTYPE YPM 27156

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.97,113A.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions, at base of high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M. and others, 1967.

HYPOTYPE YPM 27162

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.93C,D.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Concretions, Waage Locality 4 of new SD Rte 63, new roadcut along rerouted SD Rte 63, 0.1 mi W of "old roller-coaster road," and 0.4 mi NNW of Peabody Locality C0018, and 2.1 mi S of Grand River Bridge, and 3.1 mi S of Little Eagle, Little Eagle Quad., NE NE NE sec8T19NR27E,

Corson Co., South Dakota, USA. Collector: Waage, K.M., 1967.

HYPOTYPE YPM 32593[c]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.118(left).

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, *Limopsis* concretions, Little Eagle Lithofacies, *Limopsis-Gervillia* Assemblage Zone. Float, numerous concretions on lower slopes, just W of Whitehorse road and across road from localities C0002 and C0003, and 6 mi NW of Whitehorse, Whitehorse Quad., SW SW NW sec30T16NR26E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

HYPOTYPE YPM 32600

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, app.2.19.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone? Float, exposures on hill slope immediately E of E abutment of stock dam, about 0.5 mi N of Johnson Brothers Ranch house, and 6 mi S of Little Eagle, Little Eagle SE Quad., NW CORNER NE NW sec29T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M.

HYPOTYPE YPM 32601[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.114(right), app.2.18.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Upper *nicolleti* Assemblage Zone. Float accumulation from road widening and grading, concretions, road gutter and new (1964) cut on McLaughlin-Little Eagle Road ("roller-coaster road") on small hill about 4 mi S of Little Eagle, Little Eagle SE Quad., along section line S half of W EDGE SW SW sec9T19NR27E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1964.

HYPOTYPE YPM 32602[c]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, tf.118(right).

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies. Lower Trail City, float, concretions in river bed, undifferentiated LGAZ and upper LNAZ, high bluff on N bank of Grand River just W of Bullhead, Bullhead Quad., S NW sec24T21NR24E, Corson Co., South Dakota, USA. Collector: Waage, K.M., 1956 to 1959.

HYPOTYPE YPM 32842

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, p.129, app.2.17.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, *Protocardia-Oxytoma* Assemblage Zone. Float, concretions 5-9, outcrops around S end of second spur to E of ridge with localities C0242-C0244, about 0.33 mi NE of Peabody Locality C0242, S side of Long's Ridge, and 7.1 mi W of Whitehorse, Little Moreau Lake Quad., SW SW NE SW sec14T15NR25E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

CAST OF HYPOTYPE YPM 52550[d]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.132B-E.

Late Cretaceous, Maastrichtian, Fox Hills Fm. Moreau River [between Green Grass and area around Thunder Butte Village], Dewey Co., South Dakota, USA.

See also *Hoploscaphites nebrascensis* (Owen).

[a]This specimen was sawed along the dorsal-ventral axis by N.H. Landman.

[b]This includes one specimen and a cast.

[c]This specimen was dissected by N.H. Landman to expose the inner whorls.

[d]This is a cast. The original specimen, USNM 402, is at the Smithsonian Institution.

Jeletzkytes? sp.

See undet. Scaphitidae.

Kingoceras kingi Miller

HOLOTYPE YPM 16281

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.125, tf.29E, pl.42, f.6,7.

Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.280, tbl.2.

PARATYPE YPM 16282

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.125, tf.29E, pl.42, f.8,9.

=*Eoaraxoceras ruzhencevi* Spinosa, Furnish and Glenister. HYPOTYPE. Spinosa, C., Furnish, W.M. and B.F. Glenister. 1970. J. Paleont. v.44, n.4, p.732.

Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.280, pl.15, f.4,5.

Late Permian. Bed 2 of Difunta section, concretionary shale 1000 m N35E of El Indio, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Knemiceras compressum subcompressum* Hyatt**
See *Ammonites syriacus* Von Buch.

***Knemiceras syriacum* Von Buch**
See *Ammonites syriacus* Von Buch.

***Marathonites electraensis* Plummer and Scott**
See *Stacheoceras* n. sp.

***Marathonites hargisi* Böse**

HYPOTYPE YPM 12938[a], 12938C, 12939[b], 12941[c]

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.409.

=*Subkargalites hargisi.* Boardman, D.R., II, D.M. Work, R.H. Mapes and J.E. Barrick. 1994. Kansas Geol. Surv. Bull. n. 232, p.74.

HYPOTYPE YPM 12938A

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.409, pl.39, f.1,2.

=*Subkargalites hargisi.* Boardman, D.R., II, D.M. Work, R.H. Mapes and J.E. Barrick. 1994. Kansas Geol. Surv. Bull. n. 232, p.74.

HYPOTYPE YPM 12938B

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.409, pl.39, f.3,4,5(external suture).

=*Subkargalites hargisi.* Boardman, D.R., II, D.M. Work, R.H. Mapes and J.E. Barrick. 1994. Kansas Geol. Surv. Bull. n. 232, p.74, pl.2, f.13.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S, 15 E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

[a]This is a lot of approximately 25 specimens.

[b]This is a lot of approximately 10 specimens.

[c]This is a lot of approximately 12 specimens.

***Metapronorites pseudotimorensis* Miller**
See *Pronorites pseudotimorensis* Miller.

***Medlicottia burckhardti* Böse**

HYPOTYPE YPM 16702

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.84, pl.22, f.1,2.

Late Permian. Possibly horizon of bed 11 of Difunta section, limestone layer 3500 to 4300 m N15-20E of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16703

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.52, tf.12.[a]

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.84, pl.23, f.8,9.

Late Permian. Near bed 17 of Difunta section, about 50 ft below horizon of Peabody Locality B4835, about 80 m S of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16704

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.84, pl.23, f.3,5.

HYPOTYPE YPM 16705

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.84, pl.23, f.6,7.

Late Permian. Possibly horizon of bed 11 of Difunta section, limestone layer 3500 to 4300 m N15-20E of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16808

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.52, pl.10, f.3.

Permian, Word Fm. Third limestone, 0.5 mi N of hill 5611, Hess Canyon, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]Discrepancy exists between the locality description on the specimen label and the published locality.

***Medlicottia costellifera* Miller and Furnish**

HOLOTYPE YPM 16810

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.57, pl.7, f.3,4, pl.9, f.3.

Early Permian, Leonardian, Leonard Fm. Section 14, bed 16, just E of Clay Slide in Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

PARATYPE YPM 16726

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.57, pl.7, f.2.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.86, pl.24, f.1.

Early Permian, Leonardian, Leonard Fm. Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

PARATYPE YPM 16809

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.57, pl.8, f.4.[a]

Early Permian, Leonardian, Leonard Fm. Section 8, 50 ft above bed G, middle Leonard, S of Sullivan Peak, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

PARATYPE YPM 75589

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.57.

Early Permian, Leonardian, Leonard Fm. Section 14, bed 16, just E of Clay Slide in Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]Discrepancy exists between the locality description on the specimen label and the published King locality.

Medlicottia girtyi Miller and Furnish

HOLOTYPE YPM 16700

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.59, tf.14,15A.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.87, tf.7C, pl.21, f.1,2.

Permian. *Waagenoceras* zone, about bed 5 of Malascachas section, near R.E. King's Locality 38 in the Valle de Las Delicias, about 1.2 km S17W of Noria de Malascachas, Coahuila State, Mexico. Collector: Newell, N.D. and Miller, A.K.

Medlicottia kingorum Miller and Furnish

HOLOTYPE YPM 15952

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.60, tf.15B, pl.4, f.5-7.

Permian, Word Fm. Junction of Road and Gilliland Canyons, Glass Mountains, Brewster Co., Texas, USA.

Medlicottia milleri Plummer and Scott

SYNTYPE YPM 15951

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.79, pl.6, f.2,3.

SYNTYPE YPM 25715

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.79, pl.6, f.1.[a]

Permian, Choza Fm. A fossiliferous dolomite 60 ft below the top of Choza Fm, Clear Fork group, in an outcrop on E side of Mule Creek and SW of Smith's Place, S of Colorado River, Runnels Co., Texas, USA.

[a]A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

Medlicottia n. sp.

HYPOTYPE YPM 15932

Böse, E. 1917. Texas Univ. Bull. n.1762, p.184.

=*Artinskia electraensis* Plummer and Scott. PARATYPE. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.95, pl.4, f.21.[a]

HYPOTYPE YPM 15949

Böse, E. 1917. Texas Univ. Bull. n.1762, p.184.

=*Artinskia electraensis* Plummer and Scott. HOLOTYPE. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.95, pl.4, f.18,20.[b]

=*Artinskia electraensis* Plummer and Scott. HOLOTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.48, tf.8D, pl.4, f.3,4.

HYPOTYPE YPM 31225, 31226

Böse, E. 1917. Texas Univ. Bull. n.1762, p.184.

=*Artinskia electraensis* Plummer and Scott. PARATYPE. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.95.

Early Permian, Wichita Grp, Clyde Fm. About 4 mi S of Electra, Wichita Co., Texas, USA. Collector: Wrather, W.E.

[a]Incorrectly cited as T-8892 on pl.4, f.21.

[b]Incorrectly cited as T-8893 on pl.4, f.18.

***Medlicottia* sp.**

HYPOTYPE YPM 16699

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.88, pl.23, f.1,2.

Late Permian. Bed 17 of Difunta section, alternating shale and graywacke 60 m N35 E of La Difunta NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Medlicottia whitneyi* Böse**

HYPOTYPE YPM 16701

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.85, pl.22, f.3,4.

Early Permian. Bed 18 of Malascachas section, *Perrinites* shale 2600 to 2800 m S42E of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Mescalites discoidalis* (Böse)**
See *Goniloboceras*? sp. and *Gonoloboceras discoidale* Böse.

***Metalegoceras jacksoni* (Etheridge)**

HYPOTYPE YPM 13834

Miller, A.K. 1932b. Am. J. Sci. v.224, p.433, tf.2,3, pl.1, f.1,2.

HYPOTYPE YPM 25802

Miller, A.K. 1932b. Am. J. Sci. v.224, p.433.

Permian. Irwin River Coalfield, Western Australia, Australia. Collector: David, T.E.

***Metalegoceras schucherti* Miller and Furnish**

PARATYPE YPM 16778

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.100, pl.14, f.7,8.

Early Permian, Leonardian, Leonard Fm. Middle Leonard (760 ft above base), S of Sullivan Peak, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

PARATYPE YPM 16779

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.100.

Early Permian, Leonardian, Leonard Fm. Middle Leonard, S of Sullivan Peak, Glass Mountains, Brewster Co., Texas, USA. Collector: Schuchert, C.

PARATYPE YPM 16780

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.100.

Early Permian, Leonardian, Leonard Fm. Top of small hill 1 mi NE of crest of Dugout Mountain, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

PARATYPE YPM 16781

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.100.

Early Permian, Leonardian, Leonard Fm. Section 5, bed 8, section S of Altuda Mountain, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Metengonoceras acutum* Hyatt**

HYPOTYPE YPM 593

Cobban, W.A. 1987. Bull. U.S. Geol. Surv. n.1690C, p.C3, pl.3.

Late Cretaceous, Benton Shale. Brown siltstone concretions, section 2, Pit, Sioux City Brick and Tile Co., North Riverside, Woodbury Co., Iowa, USA. Collector: Waage, K.M., 1951.

***Milleroceras minusculum* Miller**
See *Goniloboceras discoidale* Böse.

***Mortoniceras shoshonense* Meek**

HYPOTYPE YPM 6423

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.9, pl.7, f.8-11.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

***Mortoniceras shoshonense crassum* Reeside**

HYPOTYPE YPM 6409

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.9, pl.8, f.14-15.

HYPOTYPE YPM 6423A

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.9.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

***Neogastroplites hassi* Reeside and Cobban, var. A**

HYPOTYPE YPM 20387

Reeside, J.B., Jr. and W.A. Cobban. 1960. U.S. Geol. Surv. Prof. Pap. n.355, p.61, pl.11, f.17-19.

HYPOTYPE YPM 20388

Reeside, J.B., Jr. and W.A. Cobban. 1960. U.S. Geol. Surv. Prof. Pap. n.355, p.62, pl.12, f.111-12.

HYPOTYPE YPM 20389

Reeside, J.B., Jr. and W.A. Cobban. 1960. U.S. Geol. Surv. Prof. Pap. n.355, p.62, tf.11K, pl.14, f.18,19.

Early Cretaceous, Shell Creek Shale. Upper Thermopolis shale, lot 2, NE of Greybull, S sec24T53NR93W, Big Horn Co., Wyoming, USA. Collector: Waage, K.M. and Eicher, D.L., 1955.

***Neopronorites bakeri* Miller and Furnish**

PARATYPE YPM 15942A–15942D

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.33.

Early Permian, Wolfcampian, Wolfcamp Fm. Upper Wolfcamp, S of high point on Dugout Mountain, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Pachammatoceras pachu* Buckman**

HOLOTYPE YPM 1473

Buckman, S.S. 1921. S.S. Buckman: London (England) v.3, pl.207, f.1,2.[a]

Early Jurassic, Yeovilian. Charolles (Saone et Loire), France.

[a]Incorrectly cited as YPM 45.

***Pachydiscus* (*Pachydiscus*) *egertoni* (Forbes)**

HYPOTYPE YPM 32984

Cobban, W.A. and W.J. Kennedy. 1995. J. Paleont. v.69, suppl.5, p.10, f.4-12,13.

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Starkville, Oktibbeha Co., Mississippi, USA. Collector: Shropshire, L.H.

***Pachydiscus* (*Pachydiscus*) *maconensis* Cobban and Kennedy**

HOLOTYPE YPM 32985[a]

Cobban, W.A. and W.J. Kennedy. 1995. J. Paleont. v.69, suppl.5, p.6, f.2-13,14.[b]

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Rotton Limestone, Buncombe Hills, Union Co., Mississippi, USA. Collector: Braun, F.A.

PARATYPE YPM 32983

Cobban, W.A. and W.J. Kennedy. 1995. J. Paleont. v.69, suppl.n.5, p.6, f.4-4,5.[c]

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Starkville, Oktibbeha Co., Mississippi, USA. Collector: Shropshire, L.H.

[a]This includes one specimen and a cast.

[b]Cast is figured; original found, but not in time for publication.

[c]Incorrectly cited as fig. 4–3-5.

***Paraceltites altudensis* (Böse)**

HYPOTYPE YPM 16285

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.123, pl.41, f.2,3.

=*Paraceltites rectangularis* Miller. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.259, tbl.2.

HYPOTYPE YPM 16286

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.123, pl.41, f.1.

=*Paraceltites rectangularis* Miller. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.259, pl.5, f.6, tbl.2.

HYPOTYPE YPM 16287

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.123, pl.41, f.4.

=*Paraceltites rectangularis* Miller. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.259, tbl.2.

HYPOTYPE YPM 16288

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.123, pl.41, f.5,6.

=*Paraceltites rectangularis* Miller. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.259, tbl.2.

HYPOTYPE YPM 16296

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.70, tf.17E.

=*Paraceltites rectangularis* Miller. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, pl.5, f.9.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

See also *Paralecanites altudensis* Böse.

***Paraceltites hoeferi* Gemmellaro**

HYPOTYPE YPM 15215

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.65, tf.17D, f.10-12.

Permian, Sosio Beds. Calcare Compatto, Palermo, Sicily, Italy.

***Paraceltites ornatus* Miller and Furnish**

SYNTYPE YPM 16280

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.68, tf.17A.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.123, tf.29A, pl.24, f.4-6.

Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, tbl.2, pl.5.

Late Permian. About bed 14 of Difunta section, concretionary shale in area of complicated structure SSE of Cerro Prieto Norte, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

SYNTYPE YPM 16804

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.68, pl.23, f.8.

Permian, Word Fm. Third limestone member, capping mountain N of Leonard Mountain along the line of section 18, SE of hill 5453, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Paraceltites rectangularis* Miller**

HOLOTYPE YPM 16290

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.123, pl.41, f.7,8.

Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.261, tbl.2, pl.5, f.7,8.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

See also *Paraceltites altudensis* (Böse).

***Paralecanites altudensis* Böse**

SYNTYPE YPM 15944[a]

Böse, E. 1917. Texas Univ. Bull. n.1762, p.178, pl.11, f.28.

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.372.

=*Paraceltites altudensis*. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.70, pl.24, f.7.

SYNTYPE YPM 15948[a]

Böse, E. 1917. Texas Univ. Bull. n.1762, p.178.

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.372.

=*Paraceltites altudensis*. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.70.

Early Permian, Leonardian, Leonard Fm. South of the intrusive plug on Captain James' ranch, Altuda Mountain, near Marathon, Brewster Co., Texas, USA.

[a]This specimen was returned to the Texas Bureau of Economic Geology in August 1967.

***Paralegoceras rectilaterale* Miller**

SYNTYPE YPM 12934A

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.402, pl.38, f.12-14.

=*Dunbarites rectilateralis*. Miller, A.K. and W.M. Furnish. 1940c. J. Paleont. v.14, n.6, p.532, tf.4A, pl.63, f.1,2.

SYNTYPE YPM 12934B

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.402.

=*Dunbarites rectilateralis*. Miller, A.K. and W.M. Furnish. 1940c. J. Paleont. v.14, n.6, p.532, pl.63, f.3-5.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S, 15 E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

***Paraperrinites tardus* (Miller and Furnish)**
See *Perrinites hilli tardus* Miller and Furnish.

***Parapronorites konincki* Gemmellaro**

Hypotype YPM 15213A

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.32, tf.3D, pl.11, f.9.

Hypotype YPM 15213B

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.32.

Permian, Sosio Beds. Calcare Compatto, Palermo, Sicily, Italy.

***Paraschistoceras reticulatum* (Miller)**
See *Schistoceras reticulatum* Miller.

***Peritrochia dunbari* Miller and Furnish**

Syntype YPM 16814

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.127, tf.34A, pl.30, f.6,7.

Early Permian, Leonardian, Leonard Fm. Section 14, bed 16, just E of Clay Slide in Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

Syntype YPM 16815

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.127, pl.30, f.4,5.

Early Permian, Leonardian, Leonard Fm. Section 5, bed 8, section S of Altuda Mountain, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

Syntype YPM 16816

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.127, pl.30, f.8,9.

Early Permian, Leonardian, Leonard Fm. Middle Leonard, S of Sullivan Peak, Glass Mountains, Brewster Co., Texas, USA. Collector: Schuchert, C.

Syntype YPM 75588

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.127.

Early Permian, Leonardian, Leonard Fm. Section 5, bed 8, section S of Altuda Mountain, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

Syntype YPM 75590

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.127.

Early Permian, Leonardian, Leonard Fm. Middle Leonard, S of Sullivan Peak, Glass Mountains, Brewster Co., Texas, USA. Collector: Schuchert, C.

Syntype YPM 75591[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.127.

Early Permian, Leonardian, Leonard Fm. Middle Leonard (760 ft above base), S of Sullivan Peak, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]This is a lot of approximately 20 specimens.

***Peritrochia ganti* (Smith)**

Hypotype YPM 15957

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p. 128.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 5 mi NE of Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: Plummer, F.B.

Hypotype YPM 16811

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.122, tf.31B, pl.29, f.11,12.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

Hypotype YPM 16813

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.122, tf.32C.

Early Permian, Wolfcampian, Wolfcamp Fm. *Uddenites* bed, about 0.5 mi W of Peabody Locality B3119, below hill 4815, and NW of Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

Hypotype YPM 16822

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.122, pl.29, f.8-10.

Pennsylvanian, Gaptank Fm. Upper Gaptank, Wolf Camp, Brewster Co., Texas, USA. Collector: King, R.E.

***Peritrochia sellardsi* Plummer and Scott**

SYNTYPE YPM 15960A, 15960B

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.129.

Early Permian, Admiral Fm. 4.5 mi SW of Coleman, type locality, Coleman Co., Texas, USA. Collector: Renfro, M.

HYPOTYPE YPM 16818

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.129.

Early Permian, Wolfcampian, Wolfcamp Fm. Upper Wolfcamp, S of high point on Dugout Mountain, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Perrinites cumminsi* (White)**
See *Perrinites* n. sp.

***Perrinites hilli* (Smith)**

HYPOTYPE YPM 16714

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118, pl.37, f.10,11.

Early Permian. Bed 20 of Malascachas section, directly overlying limestone of bed 21, yellow-brown graywacke 1200 m S61E of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16715

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118, pl.40, f.1-2.

Early Permian. Bed 18 of Malascachas section, *Perrinites* shale 2600 to 2800 m S42E of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16717

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118, pl.38, f.4.

Early Permian. Bed 18 of Malascachas section, *Perrinites* shale 2600 to 2800 m S42E of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16718

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118, pl.38, f.1-3.

Early Permian. Beds 25 and 26 of Difunta section, *Perrinites* shale 1600 m S70E of Puerto de Sardinas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16719

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118, tf.27B, pl.39, f.4,5.

Miller, A.K. and W.M. Furnish. 1957. J. Paleont. v.31, n.6, tf.2A.

Early Permian. Bed 18 of Malascachas section, *Perrinites* shale 2600 to 2800 m S42E of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16720

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118, tf.27A, pl.37, f.3-5.

HYPOTYPE YPM 16721

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118, tf.27B.

HYPOTYPE YPM 16722

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118, tf.27C.

Early Permian. Beds 25 and 26 of Difunta section, *Perrinites* shale 1600 m S70E of Puerto de Sardinas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 20215

Miller, A.K., W.M. Furnish and D.L. Clark. 1957. J. Paleont. v.31, n.6, p. 1062, pl.133, f.3-6.

=*Perrinites vidriensis* Böse. HYPOTYPE. Tharalson, D.B. 1984. J. Paleont. v.58, n.3, p.820.

Early Permian, Colina Limestone. Lower Colina Limestone, ridge W of King of Lead Mine, Cochise Co., Arizona, USA. Collector: Sabins, F.F., 8/17/1954.

See also *Perrinites hilli hilli* (Smith) and *Perrinites hilli gouldi* Plummer and Scott.

***Perrinites hilli gouldi* Plummer and Scott**

HYPOTYPE YPM 15959

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.148.

=*Perrinites hilli*. Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118.

Early Permian, Blaine Fm. Falls on Salt Croton creek, Stonewall Co., Texas, USA. Collector: Scott, G.

***Perrinites hilli hilli* (Smith)**

HYPOTYPE YPM 15966

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.144, 147.

Permian, Blaine Fm. 6 mi W of Quanah, Hardeman Co., Texas, USA.

HYPOTYPE YPM 16716

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.148.

=*Perrinites hilli.* Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118, pl.39, f.1-3.

Early Permian, Leonardian, Leonard Fm. Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16728

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.148, tf.43D, pl.34, f.7.

=*Perrinites hilli.* Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118.

Early Permian, Leonardian, Leonard Fm. 1.5 mi NW of Ojo Bonito, Chinati Mountains, Presidio Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16733

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.148, tf.43E, pl.37, f.1,2.

=*Perrinites hilli.* Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118.

Early Permian, Leonardian, Leonard Fm. Section 14, bed 16, just E of Clay Slide in Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16738

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.148, pl.33, f.1,2.

=*Perrinites hilli.* Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118.

Early Permian, Leonardian, Leonard Fm. Section 5, bed 8, section S of Altuda Mountain, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16751

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.148, pl.34, f.5.[a]

=*Perrinites hilli.* Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.118.

Early Permian, Leonardian, Hess Limestone. Uppermost Hess, 1.1 mi SW of Word Ranch house, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]Cited as *Perrinites hilli* on pl.34, f.5, although referred to in the text as *P. hilli hilli.*

***Perrinites hilli tardus* Miller and Furnish**

SYNTYPE YPM 16758

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.154, pl.34, f.3,4.

=*Paraperrinites tardus.* LECTOTYPE. Tharalson, D.B. 1984. J. Paleont. v.58, n.3, p.828, f.21,22A-B.

SYNTYPE YPM 16759

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.154, tf.39A,D.

=*Paraperrinites tardus.* PARALECTOTYPE. Tharalson, D.B. 1984. J. Paleont. v.58, n.3, p.828, f.21.

SYNTYPE YPM 16760

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.154.

Early Permian, Leonardian, Leonard Fm. "Fossil Hill," Finlay Dome, N of Finlay, Finlay Mountains, Hudspeth Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16730

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.154, tf.37B,43A, pl.35, f.6,7.

=*Paraperrinites tardus.* Tharalson, D.B. 1984. J. Paleont. v.58, n.3, p.828, f.21J,22C.

Early Permian, Leonardian, Leonard Fm. Leonard Fm (860 ft up from base), about 4 mi SW of Iron Mountain, Brewster Co., Texas, USA. Collector: Schuchert, C.

***Perrinites* n. sp.**

HYPOTYPE YPM 15967

Böse, E. 1917. Texas Univ. Bull. n.1762, p.187.

=*Perrinites cumminsi* (White). Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.311.

=*Properrinites cumminsi vicinus* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.143, tf.39b, pl.33, f.3,4.

=*Properrinites cumminsi* (White). Tharalson, D.B. 1984. J. Paleont. v.58, n.3, p.825, tf.19C.[a]

HYPOTYPE YPM 25710, 25711, 31228–31241

Böse, E. 1917. Texas Univ. Bull. n.1762, p.187.

=*Properrinites cumminsi vicinus* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.143.

HYPOTYPE YPM 25712

Böse, E. 1917. Texas Univ. Bull. n.1762, p.187.

=*Perrinites cumminsi* (White). Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.311, pl.25, f.9.

=*Properrinites cumminsi vicinus* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.143.

=*Properrinites cumminsi* (White). Tharalson, D.B. 1984. J. Paleont. v.58, n.3, p.825.

HYPOTYPE YPM 25713

Böse, E. 1917. Texas Univ. Bull. n.1762, p.187.

=*Perrinites cumminsi* (White). Sellards, E.H. 1932. Texas Univ. Bull. n.3232, pl.6, f.5-7.

=*Perrinites cumminsi* (White). Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.311, pl.25, f.5.[b]

=*Properrinites cumminsi vicinus* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.143.

=*Properrinites cumminsi* (White). Tharalson, D.B. 1984. J. Paleont. v.58, n.3, p.825.

HYPOTYPE YPM 31227

Böse, E. 1917. Texas Univ. Bull. n.1762, p.187.

=*Perrinites cumminsi* (White). Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.311.

=*Properrinites cumminsi vicinus* Miller and Furnish. SYNTYPE. Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.143, tf.40B.

=*Properrinites cumminsi vicinus* Miller and Furnish. SYNTYPE. Miller, A.K. and W. Youngquist. 1947a. Univ. Kans. Paleont. Contrib. Mollusca, Art.1, p.14, tf.4B.

=*Properrinites cumminsi* (White). Tharalson, D.B. 1984. J. Paleont. v.58, n.3, p.825, tf.19I,K,20D-E.[c]

Early Permian, Wichita Grp, Clyde Fm. About 4 mi S of Electra, Wichita Co., Texas, USA. Collector: Wrather, W.E.

[a]Cited as 15967A.

[b]Incorrectly cited as T-9613 on pl.25, f.5.

[c]Cited as 15967B.

Perrinites vidriensis Böse

See *Perrinites hilli* (Smith).

Phlycticrioceras oregonense Reeside

HOLOTYPE YPM 6407A

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.3, pl.1, f.5-8.

=*Phlycticrioceras douvillei* (de Grossouvre). HYPOTYPE. Clark, D.L. 1963. J. Paleont. v.37, n.2, p.430, pl.52, f.7.

HYPOTYPE YPM 6407

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.3, pl.1, f.14-18.

=*Phlycticrioceras douvillei* (de Grossouvre). Clark, D.L. 1963. J. Paleont. v.37, n.2, p.430.

HYPOTYPE YPM 6407B

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.3, pl.1, f.14-18.

=*Phlycticrioceras douvillei* (de Grossouvre). Clark, D.L. 1963. J. Paleont. v.37, n.2, p.430, pl.52, f.3,4.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

Phylloceras nilssoni (La Verpilliere)

HYPOTYPE YPM 1831A

Tanabe, K., N.H. Landman and W. Weitschat. 1993. Systematics Assoc. Spec. Vol. n.47, p.80.[a]

Tanabe, K. and N.H. Landman. 1996. Top. Geobio. v.13, app., p.161.[a]

Early Jurassic. Monte Catria, central Apennines, Italy.

[a]Cited as YPM 1831.

***Placenticeras intercalare* Meek**

HYPOTYPE YPM 1736

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.207, pl.36, f.2-4.

HYPOTYPE YPM 1737

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.207.

Late Cretaceous, Montana Grp, Pierre Shale. South Dakota, USA.

HYPOTYPE YPM 1838

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.207, pl.35, f.1,2, pl.36, f.1.

Late Cretaceous, Pierre Shale. Sage Creek, Pennington Co., South Dakota, USA.

***Placenticeras planum* Hyatt**

HYPOTYPE YPM 34711

Hicks, J.F., J.D. Obradovich and L. Tauxe. 1995. J. Geol. v.103. p.246.

Late Cretaceous, Telegraph Creek Fm, Elk Basin Sandstone Mbr, *Scaphites hippocrepsis* 1 Zone. Top surface of uppermost unit of Elk Basin, N-S butte top ridge, E side of basinal cove of anticline, 0.5-0.7 mi due N of Elk Basin Village (abandoned), Elk Basin, Elk Basin Quad., straddles Range line E SIDE SE NE NE sec24T58NR100W, straddles Range line W SIDE SW NW NW sec19T58NR99W, SE SE SE sec35T9SR100W, Carbon Co., Montana, USA. Collector: Hicks, J.F., 1992.

***Placenticeras pseudoplacenta* Hyatt**

HYPOTYPE YPM 6413

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.8, pl.2, f.20-21.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

***Placenticeras spillmani* Hyatt**

SYNTYPE YPM 27806

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.233.

=*Placenticeras spillmani*?. Reeside, J.B., Jr. 1962. Bull. N.J. Bur. Geol. Topog. v.61, pt.2, p.130, pl.73, f.6,7.

Cretaceous. Greensand, Burlington, Burlington Co., New Jersey, USA.

***Placenticeras spillmani*? Hyatt**

See *Placenticeras spillmani* Hyatt.

***Placenticeras whitfieldi* Hyatt**

SYNTYPE YPM 9293

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.221.

Late Cretaceous, Montana Grp, Pierre Shale. Badlands, South Dakota, USA. Collector: Clifford, H.C.

***Plummerites incertus* (Böse)**

HOLOTYPE YPM 16785

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.103, tf.26, pl.30, f.1-3.

Late Pennsylvanian, Gaptank Fm. Bed 1, Wolf Camp section, Wolf Camp, Glass Mountains, Brewster Co., Texas, USA.

***Popanoceras bowmani* (Böse)**

HYPOTYPE YPM 16819A[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.134, tf.36C, pl.31, f.15, pl.32, f.8,9.

Miller, A.K. and W.M. Furnish. 1957. J. Paleont. v.31, n.6, p.1052, tf.1A.

HYPOTYPE YPM 16819B

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.134, pl.32, f.6,7.

HYPOTYPE YPM 16819C

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.134, pl.32, f.10-13.

HYPOTYPE YPM 16820

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.134, pl.32, f.5.

HYPOTYPE YPM 75587

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.134.

Permian, Word Fm. Third limestone member, on S side of Road Canyon, W of divide separating the drainage of Gilliland and Hess Canyons, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

***Popanoceras* sp.**

HYPOTYPE YPM 16821

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.136, pl.32, f.14.

Early Permian, Leonardian, Hess Limestone. Uppermost Hess, 1.1 mi SW of Word Ranch house, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Preshumardites gaptankensis* (Miller)**
See *Gastrioceras gaptankense* Miller.

***Prodromites gorbyi* (Miller)**

HYPOTYPE YPM 31901

Smith, J.P. and S. Weller. 1901. Contrib. Walker Mus. v.1, n.2, p.37.

Miller, A.K. and C. Collinson. 1951. J. Paleont. v.25, n.4, p.482.

Early Mississippian, Kinderhookian. Rockford, Jackson Co., Indiana, USA.

***Pronorites pseudotimorensis* Miller**

SYNTYPE YPM 12931[a]

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.395.

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.59.

SYNTYPE YPM 12931A

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.395, pl.38, f.18-23.

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.59.

=*Metapronorites pseudotimorensis*. LECTOTYPE. Nassichuk, W.W. 1975 Bull. Canad. Geol. Surv. n.237, p.65, tf.23-c.

SYNTYPE YPM 12931B[b]

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.395, pl.38, f.24.

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.59.

SYNTYPE YPM 12931C[b]

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.395, pl.38, f.25,26.

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.59.

SYNTYPE YPM 12931D

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.395.

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.59.

=*Metapronorites pseudotimorensis*. PARALECTOTYPE. Nassichuk, W.W. 1975 Bull. Canad. Geol. Surv. n.237, p.65, tf.23-b.

SYNTYPE YPM 12931E

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.395.

Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.59.

=*Metapronorites pseudotimorensis*. PARALECTOTYPE. Nassichuk, W.W. 1975 Bull. Canad. Geol. Surv. n.237, p.65, tf.23-ab.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S, 15 E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

[a]This consists of 18 fragments representing approximately three specimens.

[b]A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

***Properrinites bosei bosei* Plummer and Scott**

HYPOTYPE YPM 15964

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.140, tf.38B.

Early Permian, Admiral Fm. 5 mi SW of Coleman, Coleman Co., Texas, USA. Collector: Plummer, F.B.

***Properrinites cumminsi* (White)**
See *Perrinites* n. sp.

***Properrinites cumminsi vicinus* Miller and Furnish**
See *Perrinites* n. sp.

***Propinacoceras beyrichi* Gemmellaro**

HYPOTYPE YPM 15219

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.40, pl.5, f.5,6.

Permian, Sosio Beds. Calcare Compatto, Palermo, Sicily, Italy.

***Propinacoceras galilaei*? Gemmellaro**

HYPOTYPE YPM 15220

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.41, tf.6A,6B.

HYPOTYPE YPM 15221

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.41, tf.6C.

Permian, Sosio Beds. Calcare Compatto, Palermo, Sicily, Italy.

***Propinacoceras knighti* Miller and Furnish**

PARATYPE YPM 16805

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.42, pl.5, f.1,2.

Early Permian, Leonardian, Leonard Fm. Middle Leonard, lower *Perrinites* horizon, 0.6 mi E of hill 4910, E of Clay slide, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

PARATYPE YPM 16806

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.42, pl.5, f.3,4.

Early Permian, Leonardian, Leonard Fm. Leonard horizon, Glass Mountains, Texas, USA. Collector: King, R.E.

PARATYPE YPM 16807A–16807E

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.42.

Early Permian, Leonardian, Leonard Fm. "Fossil Hill," Finlay Dome, N of Finlay, Finlay Mountains, Hudspeth Co., Texas, USA. Collector: King, R.E.

***Propinacoceras* sp.**

HYPOTYPE YPM 16697

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.83, tf.6, pl.22, f.5,6.

HYPOTYPE YPM 16698A–16698C

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.83.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Prothalassoceras kingorum* Miller**

SYNTYPE YPM 12937[a]

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.407.

SYNTYPE YPM 12937A

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.407, pl.39, f.10,11.

SYNTYPE YPM 12937B[b]

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.407, pl.39, f.12.[c]

SYNTYPE YPM 12937C

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.407, pl.39, f.13.[c]

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S, 15 E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

SYNTYPE YPM 12943

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.407.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 2.5 mi S of Arnold Ranch, below Dugout Creek overthrust, N side of hill, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

[a]This is a lot of approximately 25 specimens.

[b]A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

[c]The figured drawing was made of a specimen probably located in lot 12937, but which cannot be distinguished at this time.

***Prouddenites primus* Miller**

SYNTYPE YPM 12932[a]

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.397.

Miller, A.K. and W.M. Furnish. 1940c. J. Paleont. v.14, n.6, p.533.

Unklesbay, A.G. 1962. Bull. Okla. Geol. Surv. n.96, p.121.

SYNTYPE YPM 12932A

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.397, pl.38, f.3-6.

Miller, A.K. and W.M. Furnish. 1940c. J. Paleont. v.14, n.6, p.533.

Unklesbay, A.G. 1962. Bull. Okla. Geol. Surv. n.96, p.121.

SYNTYPE YPM 12932B

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.397, pl.38, f.7.

Miller, A.K. and W.M. Furnish. 1940c. J. Paleont. v.14, n.6, p.533.

Unklesbay, A.G. 1962. Bull. Okla. Geol. Surv. n.96, p.121.[b]

SYNTYPE YPM 12932C

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.397, pl.38, f.8.

Miller, A.K. and W.M. Furnish. 1940c. J. Paleont. v.14, n.6, p.533.

Unklesbay, A.G. 1962. Bull. Okla. Geol. Surv. n.96, p.121.[b]

SYNTYPE YPM 12932D

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.397, pl.38, f.9-10.

Miller, A.K. and W.M. Furnish. 1940c. J. Paleont. v.14, n.6, p.533.

Unklesbay, A.G. 1962. Bull. Okla. Geol. Surv. n.96, p.121.[b]

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S, 15 E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

SYNTYPE YPM 12942

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.397.

Miller, A.K. and W.M. Furnish. 1940c. J. Paleont. v.14, n.6, p.533.

Unklesbay, A.G. 1962. Bull. Okla. Geol. Surv. n.96, p.121.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 2.5 mi S of Arnold Ranch, below Dugout Creek overthrust, N side of hill, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

[a]This is a lot of approximately 25 specimens.

[b]The figured drawing was made of a specimen probably located in lot 12932, but which cannot be distinguished at this time.

Pseudagathiceras difuntense Miller

SYNTYPE YPM 16304

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.101, pl.29, f.6,7.

Late Permian. Between beds 8 and 14 of Malascachas section, possibly bed 12, limestone layer 1200 m S17W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

SYNTYPE YPM 16305

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.101, pl.29, f.8,9.

SYNTYPE YPM 16306

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.101, tf.15C, pl.29, f.10-12.

Late Permian. Bed 17 of Difunta section, alternating shale and graywacke 60 m N35 E of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

Pseudagathiceras spinosum Miller

HOLOTYPE YPM 16310

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.103, pl.29, f.1,2.

Davis, R.A. 1972. Bull. Am. Paleont. v.62, n.272, p.56, pl.9, f.1,2.

Davis, R.A., N.H. Landman, J.L. Dommergues, D. Marchand and H. Bucher. 1996. Top. Geobio. v.13, p.466, f.3F,G.

PARATYPE YPM 16311

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.103, tf.15D, pl.29, f.3-5.

Late Permian. Beds 5, 6 and 7 of Malascachas section, area 1200 m S17W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Pseudogastrioceras haacki* Miller**

SYNTYPE YPM 16254

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.92, pl.26, f.14,15.

Permian. Higher than the zone of *Timorites* (?), below El Indio on the trail, Valle de Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

SYNTYPE YPM 16257

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.92, tf.9A, pl.26, f.11-13.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Pseudogastrioceras roadense* (Böse)**

HYPOTYPE YPM 16251

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.89, tf.8, pl.24, f.2,3.

HYPOTYPE YPM 16253

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.89, pl.25, f.3,4.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16255

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.89, pl.25, f.1,2.

HYPOTYPE YPM 16256

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.89, pl.25, f.5.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16258

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.89, pl.25, f.6.

Late Permian. Beds 5, 6 or 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16262

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.89.

Late Permian. Bed 17 of Difunta section, alternating shale and graywacke 60 m N35 E of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16792

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.89, pl.16, f.1,2.

Permian, Word Fm. Second limestone, 0.5 mi N of hill 5611, Hess Canyon, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16793

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.89, pl.16, f.3-4.

HYPOTYPE YPM 16794

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.89, pl.16, f.5.

Permian, Word Fm. Lower limestone, limestone capping hill between benchmark 4873 and 4869, Gilliland Canyon, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16795

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.89, pl.16, f.6,7.

Permian, Word Fm. Third limestone, section 17, top of hill S of junction of Road and Gilliland Canyons, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16797

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.89, pl.28, f.1,2.

Permian, Word Fm. Third limestone member, on S side of Road Canyon, W of divide separating the drainage of Gilliland and Hess Canyons, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16798

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.89, pl.28, f.3.

Permian, Word Fm. Second limestone, junction of Road and Gilliland Canyons, Glass Mountains, Brewster Co., Texas, USA. Collector: Schuchert, C.

***Pseudogastrioceras serratum* (Girty)**

HYPOTYPE YPM 16796

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.91, pl.19, f.2,3.

Permian, Word Fm. Second limestone, 0.5 mi N of hill 5611, Hess Canyon, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Pseudophyllites indra* (Forbes)**

HYPOTYPE YPM 32981

Cobban, W.A. and W.J. Kennedy. 1995. J. Paleont. v.69, suppl.5, p.4, f.2-3,4.

HYPOTYPE YPM 32982

Cobban, W.A. and W.J. Kennedy. 1995. J. Paleont. v.69, suppl.5, p.4, f.2-10.

Late Cretaceous, Selma Grp, Prairie Bluff Chalk. Starkville, Oktibbeha Co., Mississippi, USA. Collector: Shropshire, L.H.

Scaphites hippocrepis I

HYPOTYPE YPM 34704, 34705

Hicks, J.F., J.D. Obradovich and L. Tauxe. 1995. J. Geol. v.103, p.246.

Late Cretaceous, Telegraph Creek Fm, Elk Basin Sandstone Mbr, *Scaphites hippocrepsis* 1 Zone. Top surface of uppermost unit of Elk Basin, N-S butte top ridge, E side of basinal cove of anticline, 0.5-0.7 mi due N of Elk Basin Village (abandoned), Elk Basin, Elk Basin Quad., straddles Range line E SIDE SE NE NE sec24T58NR100W, straddles Range line W SIDE SW NW NW sec19T58NR99W, SE SE SE sec35T9SR100W, Carbon Co., Montana, USA. Collector: Hicks, J.F., 1992.

***Scaphites ventricosus* Meek and Hayden**

HYPOTYPE YPM 6419[a]

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.6.

HYPOTYPE YPM 6419A[b]

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.6, pl.3, f.11-18.[c]

HYPOTYPE YPM 26721

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.6, pl.4, f.1-4.[d]

HYPOTYPE YPM 26722

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.6.[d]

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

[a]This is a lot of approximately 15 specimens.

[b]This is a lot of five specimens.

[c]Incorrectly cited as YPM 6421 on p.6 and in the explanation for pl.3, f.11-18. The horizon given on the specimen label is "800 feet above Torchlight," not "600 feet above base."

[d]Incorrectly cited as YPM 641 on p.6 and in the explanation for pl.4, f.6-10. The horizon given on the specimen label is "800 feet above Torchlight," not "600 feet above base."

***Scaphites ventricosus depressus* Reeside**

HOLOTYPE YPM 6414

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.7, pl.5, f.6-10.[a]

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

[a]Not YPM 6417 as stated on p.6 and in the explanation for pl.5, f.6-10.

***Scaphites ventricosus interjectus* Reeside**

HOLOTYPE YPM 6416

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.7, pl.5, f.1-4.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

***Scaphites ventricosus oregonensis* Reeside**

HOLOTYPE YPM 6411A

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.7, pl.6, f.11-12.

HYPOTYPE YPM 6411B

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.7, pl.6, f.13-15.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

***Scaphites ventricosus stantoni* Reeside**

HYPOTYPE YPM 6410

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.7, pl.3, f.19-20.

HYPOTYPE YPM 26720

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.7, pl.4, f.5-8.[a]

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

[a]Incorrectly cited as YPM 6417 in the explanation for pl.4, f.5-8.

***Scaphites vermiformis binneyi* Reeside**

HOLOTYPE YPM 6418A

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.8, pl.6, f.1-6.[a]

HYPOTYPE YPM 6418[b]

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.8.

HYPOTYPE YPM 6418B

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.8, pl.6, f.7-8.[c]

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

[a]Incorrectly cited as YPM 6417 in the explanation for pl.6, f.1-6.

[b]This consists of six fragments representing approximately three specimens.

[c]Incorrectly cited as YPM 6417 in the explanation for pl.6, f.7,8.

***Scaphites vermiformis* Meek and Hayden**

HYPOTYPE YPM 6422

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.7, pl.6, f.9-10.

HYPOTYPE YPM 6422A

Reeside, J.B., Jr. 1927. U.S. Geol. Surv. Prof. Pap. n.150-A, p.7.

Late Cretaceous, Frontier Fm, Torchlight Sandstone Mbr. 800 ft above Torchlight, Oregon Basin, sec6T51NR100W, Park Co., Wyoming, USA. Collector: Binney, E., Jr., 1925.

HYPOTYPE YPM 11169

Landman, N.H. 1982. Discovery v.16, n.2, p.23, f.(top).

Cretaceous, Niobrara Fm. Near Black Hills, "but probably Bighorn Region-KMW," South Dakota, USA. Collector: Marsh, O.C.

***Scaphites* cf. *whitfieldi* Cobban**

HYPOTYPE YPM 37619[a]

Landman, N.H. 1987. Bull. Am. Mus. Nat. Hist. v.185, art.2, p.130, tf.8D.[b]

HYPOTYPE YPM 37620[c]

Landman, N.H. 1987. Bull. Am. Mus. Nat. Hist. v.185, art.2, p.133, tf.14A-D.[d]

Late Cretaceous, Carlile Shale, Turner Sandy Mbr. Huge limestone concretions, N end of Orman Dam, E side of Belle Fourche Reservoir, and 3.5 mi N of U.S. Route 212, and 10 mi NE of Belle Fourche, butte Co., South Dakota, USA. Collector: Waage, K.M. and N.H. Landman.

[a]This is a fragment of the protoconch mounted on an SEM stub.

[b]This specimen is cited as YPM 6240 in the explanation for figure 8D.

[c]This consists of the caecum and prosiphonal attachment sheets mounted on an SEM stub.

[d]This specimen is cited as YPM 6239 in the explanation for figure 14A-D.

***Schistoceras missouriense* (Miller and Faber)**

HYPOTYPE YPM 75586[a]

Miller, A.K. and W.M. Furnish. 1940c. J. Paleont. v.14, n.6, p.540.

Late Pennsylvanian, Gaptank Fm. Near Gaptank, about 0.25 mi E of edge of Hess Canyon Quad., Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]This is a lot of six specimens.

***Schistoceras reticulatum* Miller**

HOLOTYPE YPM 12935A

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.403, pl.39, f.6-9.

=*Paraschistoceras reticulatum*. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.253.

PARATYPE YPM 12935B

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.403,406.

=*Paraschistoceras reticulatum*. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.253.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S, 15 E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

***Schistoceras smithi* Böse**

HYPOTYPE YPM 12936[a], 12936B, 12940

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.406.

HYPOTYPE YPM 12936A

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.406, pl.39, f.14-16.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S, 15 E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

[a]This consists of six fragments representing approximately three specimens.

***Schlotheimia lacunoides* Quenstedt**

HYPOTYPE YPM 2000

Buckman, S.S. 1906. Proc. Cotteswold Naturalists' Field Club v.15, pt.3, p.240, pl.10, f.7,8.

Early Jurassic. Lias B, Betzgenrieth, Germany.

***Schlotheimia rumpens* Oppel**

HYPOTYPE YPM 2007

Buckman, S.S. 1906. Proc. Cotteswold Naturalists' Field Club v.15, pt.3, p.242, pl.10, f.21,22.

HYPOTYPE YPM 2008

Buckman, S.S. 1906. Proc. Cotteswold Naturalists' Field Club v.15, pt.3, p.242.

Early Jurassic. Lias B, Betzgenrieth, Germany.

***Shumardites uddeni* (Böse)**

HOLOTYPE YPM 16812

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.122, tf.32A.

Early Permian, Wolfcampian, Wolfcamp Fm. *Uddenites* bed, about 0.5 mi W of Peabody Locality B3119, below hill 4815, and NW of Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Spathiocaris emersonii* Clarke**

SYNTYPE? YPM 86

Clarke, J.M. 1882. Am. J. Sci. v.23, p.478.[a]

SYNTYPE? YPM 34984

Clarke, J.M. 1882. Am. J. Sci. v.23, p.478.[a]

Late Devonian, Portage Grp. Naples, Ontario Co., New York, USA.

[a]Although not cited in Clarke (1882), these specimens are labelled as type in Clarke's handwriting.

***Sphenodiscus beecheri* Hyatt**

PARATYPE YPM 27809

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.78, pl.6, f.3,4.[a]

Reeside, J.B., Jr. 1962. Bull. N.J. Bur. Geol. Topog. v.61, pt.2, p.137, pl.75, f.1,2.

Cretaceous. Greensand, Burlington, Burlington Co., New Jersey, USA.

PARATYPE YPM 27811

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.78.

Late Cretaceous, Montana Grp, Pierre Shale. Badlands, South Dakota, USA. Collector: Clifford, H.C.

[a]Incorrectly cited as No. 200.

***Sphenodiscus lenticularis* (Owen)**

HYPOTYPE YPM 27805

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.71, pl.9, f.1-6.

Late Cretaceous, Fox Hills Fm. Rock Creek, Wyoming, USA. Collector: Brown, F., 1884.

HYPOTYPE YPM 34985[a]

Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, p.357, f.13A,B.

HYPOTYPE YPM 35096

Waage, K.M. 1968. Bull. Peabody Mus. Nat. Hist. (Yale Univ.) n.27, pl.7, f.a.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Timber Lake Mbr. Includes CAZ and *Sphenodiscus* Layer, all collections from float and in sand banks of roadcut of abandoned US Rte 12, RR cut and spillway of Lantry Dam, 1.5 mi WNW of Lantry, Lantry Quad., CENTER SW SW sec4T12NR22E, Dewey Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1940 to 1962.

[a]These are the inner whorls mounted on an SEM stub.

Sphenodiscus lenticularis mississippiensis Hyatt

HYPOTYPE YPM 27866

Dunbar, C.O. 1928. Am. J. Sci. v.216, p.164.

HYPOTYPE YPM 27867

Dunbar, C.O. 1928. Am. J. Sci. v.216, p.165.

Late Cretaceous, Ripley Fm. Near top of Ripley, 20 ft below ground surface, fresh roadcut in low bluff on S side of King Creek, on New Albany-Ingomar Road, 3 mi S of New Albany, W SIDE NW sec29T7SR3E, Union Co., Mississippi, USA. Collector: Barton, E.R., 1927.

Sphenodiscus lobatus (Tuomey)

HYPOTYPE YPM 27812

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.66, pl.9, f.11,12.

Late Cretaceous, Selma Grp, Ripley Fm. Buncombe Hills, Union Co., Mississippi, USA. Collector: Braun, F.A.

Sphenodiscus pleurisepta (Conrad)

HYPOTYPE YPM 27807

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.59.

Late Cretaceous. "Rotten Limestone Grp," Brooksville, Noxubee Co., Mississippi, USA. Collector: Braun, F.A.

HYPOTYPE YPM 27817

Hyatt, A. 1903. Mono. U.S. Geol. Surv. n.44, p.59, pl.6, f.6.

Late Cretaceous, Selma Grp, Ripley Fm. Buncombe Hills, Union Co., Mississippi, USA. Collector: Braun, F.A.

Spiroceras calloviense Morris

HYPOTYPE YPM 1854A[a]

Tanabe, K., N.H. Landman and W. Weitschat. 1993. Systematics Assoc. Spec. Vol. n.47, p.81.[a]

Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.394.[b]

Tanabe, K. and N.H. Landman. 1996. Top. Geobio. v.13, app., p.161.[b]

Middle Jurassic, Callovian. Sutton, Wiltshire, England, United Kingdom.

[a]This is an ammonitella mounted on an SEM stub.

[b]Cited as YPM 1854.

Stacheoceras gemmellaroi Miller

SYNTYPE YPM 16653

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107, pl.37, f.6-8.

SYNTYPE YPM 16654, 16656

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107.

SYNTYPE YPM 16655

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107, tf.18.

Late Permian. Beds 5, 6 and 7 of Malascachas section, area 1200 m S17W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

Stacheoceras gemmellaroi? Miller

SYNTYPE YPM 16657

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.108.

Late Permian. Bed 2 of Malascachas section, limestone 2000 m S32W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

Stacheoceras n. sp.

HYPOTYPE YPM 15962

Böse, E. 1917. Texas Univ. Bull. n.1762, p.190.

=*Marathonites electraensis* Plummer and Scott. HOLOTYPE. Plummer, F.B. and G. Scott. 1937. Texas Univ. Bull. n.3701, v.3, pt.1, p.148, pl.32, f.1,2.[a]

Early Permian, Wichita Grp, Clyde Fm. About 4 mi S of Electra, Wichita Co., Texas, USA. Collector: Wrather, W.E.

[a]Incorrectly cited as T-8887.

Stacheoceras rothi Miller and Furnish

SYNTYPE YPM 16817A

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132, tf.34A, pl.30, f.10.

Miller, A.K. and W.M. Furnish. 1957. J. Paleont. v.31, n.6, tf.1b.

SYNTYPE YPM 16817B

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132, pl.30, f.11.

SYNTYPE YPM 16817C

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132, pl.30, f.12.

SYNTYPE YPM 75592[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132.

Early Permian, Leonardian, Hess Limestone. Uppermost Hess, 1.1 mi SW of Word Ranch house, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]This is a lot of approximately 15 specimens.

Stacheoceras toumanskyae Miller and Furnish

SYNTYPE YPM 16321

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107, pl.30, f.3,4.

SYNTYPE YPM 16322

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107, pl.30, f.1,2.

SYNTYPE YPM 16323

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107, pl.30, f.8.

SYNTYPE YPM 16324

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107, pl.26, f.1-3.

SYNTYPE YPM 16325

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107, pl.30, f.5-7.

SYNTYPE YPM 16651

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132, tf.35.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107, tf.17.

SYNTYPE YPM 16652A

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.132.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.107.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

Strigogoniatites kingi Miller

SYNTYPE YPM 16252

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.92, tf.9B, pl.27, f.1-3.

SYNTYPE YPM 16259[a], 16260, 16261A, 16261B, 55029–55036, 55061–55085

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.92.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio

on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

[a]This specimen lot consists of approximately forty fragments.

***Subkargalites hargisi* (Böse)**
See *Marathonites hargisi* Böse.

***Thalassoceras* sp.**

HYPOTYPE YPM 16786

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.107.

Early Permian, Leonardian, Leonard Fm. Middle Leonard (760 ft above base), S of Sullivan Peak, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

***Timorites schucherti* Miller and Furnish**

SYNTYPE YPM 16692

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.175, tf.57C.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.117, tf.26A, pl.35, f.10,11.

Late Permian. Beds 5, 6 or 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

SYNTYPE YPM 16693

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.115, pl.35, f.8,9.

SYNTYPE YPM 16694

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.175, tf.55.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.117, tf.26B, pl.36, f.1,2.

SYNTYPE YPM 16695

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.175, tf.57A.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.117, tf.25A,B.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Tornoceras* (*Tornoceras*) *aff. mesopleuron* House**

HYPOTYPE YPM 23855

House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.90, tf.3C.

Devonian. Cherry Valley, Otsego Co., New York, USA.

***Tornoceras* (*Tornoceras*) *uniangulare* (Conrad)**
See *Tornoceras uniangulare* Conrad.

***Tornoceras* (*Tornoceras*) *uniangulare aldanense* House**

HYPOTYPE YPM 20836

House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101, tf.8F.

Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20837

House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101, tf.8E.

Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20839

House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101, tf.8C.

Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

Middle Devonian, Hamilton Grp. Wende Station [New York Central Railroad], Erie Co., New York, USA.

See also *Tornoceras uniangulare* Conrad.

***Tornoceras uniangulare* Conrad**

HYPOTYPE YPM 20826

Beecher, C.E. 1890. Am. J. Sci. v.140, p.72, pl.1, f.1,2.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20827

Beecher, C.E. 1890. Am. J. Sci. v.140, p.72, pl.1, f.3.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101, tf.8L.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20828

Beecher, C.E. 1890. Am. J. Sci. v.140, p.73, pl.1, f.4,5.

=*Tornoceras* (*Tornoceras*) *uniangulare* (Conrad). Miller, A.K. 1938. Geol. Soc. Am. Spec. Pap. n.14, p.157, tf.34L,34M.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20829

Beecher, C.E. 1890. Am. J. Sci. v.140, p.73, pl.1, f.6.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101, tf.8M.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20830

Beecher, C.E. 1890. Am. J. Sci. v.140, p.74, pl.1, f.7.

=*Tornoceras* (*Tornoceras*) *uniangulare* (Conrad). Miller, A.K. 1938. Geol. Soc. Am. Spec. Pap. n.14, p.157, tf.34K.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101, pl.7, f.55.[a]

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20831

Beecher, C.E. 1890. Am. J. Sci. v.140, pl.1, f.8,9.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101, tf.8b, pl.7, f.51-54.[b]

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20832

Beecher, C.E. 1890. Am. J. Sci. v.140, p.74, pl.1, f.10.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101, pl.7, f.60.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20833

Beecher, C.E. 1890. Am. J. Sci. v.140, p.74, pl.1, f.11.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. HYPOTYPE. Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

HYPOTYPE YPM 20834

Beecher, C.E. 1890. Am. J. Sci. v.140, p.73, pl.1, f.12.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. Hypotype. House, M.R. 1965. Phil. Trans. Roy. Soc. London v.250, ser.b, n.763, p.101.

=*Tornoceras* (*Tornoceras*) *uniangulare aldanense* House. Hypotype. Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, app.1, p.384.

Middle Devonian, Hamilton Grp. Wende Station [New York Central Railroad], Erie Co., New York, USA.

Hypotype YPM 20835

Beecher, C.E. 1890. Am. J. Sci. v.140, pl.1, f.13.

Middle Devonian, Hamilton Grp. Eighteen Mile Creek, New York, USA.

Hypotype YPM 30405[c]

Beecher, C.E. 1890. Am. J. Sci. v.140, pl.1, f.14.

=*Tornoceras* (*Tornoceras*) *uniangulare* (Conrad). Miller, A.K. 1938. Geol. Soc. Am. Spec. Pap. n.14, p.157, tf.34A-J.

Middle Devonian, Hamilton Grp. Wende Station [New York Central Railroad], Erie Co., New York, USA.

[a]Incorrectly cited as YPM 2043/11 on p.101 and as YPM 20930 on pl.7, f.55.

[b]Incorrectly cited as YPM 30381 in tf.8B.

[c]A thorough search of the collections by the curatorial staff in the 1960s and 1990s could not locate this specimen. It is believed to be permanently lost.

Uddenites harlani? Plummer and Scott

Hypotype YPM 16801

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.37, pl.3, f.8.

Early Permian, Wolfcampian, Wolfcamp Fm. Section 27, bed 13, *Uddenites* bed, hill 4752, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

Uddenites oweni Miller and Furnish

Holotype YPM 16800

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.37, pl.2, f.1,2.

Hypotype YPM 16802

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.37, tf.5A.

Early Permian, Leonardian, Gaptank Fm. 5 mi NE of Wolf Camp, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

Uddenites schucherti Böse

Hypotype YPM 12945

Miller, A.K. 1930. J. Paleont. v.4, n.4, p.400, pl.39, f.17-19.

Late Pennsylvanian, Gaptank Fm. Upper Gaptank, 4.5 mi S, 15 E of Lenox, Brewster Co., Texas, USA. Collector: King, P.B., King, R.E. and Baker, C.L.

Hypotype YPM 16799

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.37, tf.4C, pl.2, f.3,4.

Pennsylvanian, Gaptank Fm. Wolf Camp, Brewster Co., Texas, USA. Collector: King, R.E.

undet. Scaphitidae

Hypotype YPM 23221[a]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.42B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies. Float, several horizons, POAZ to top of TCM, top knob on end of SE-trending spur, and 6 mi NW of Whitehorse, Whitehorse Quad., SE NW NW sec30T16NR26E, Dewey Co., South Dakota, USA. Collector: Waage, K.M., 1957.

Hypotype YPM 34113[b]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.13D-F.[c]

Landman, N.H., K. Tanabe and Y. Shigeta. 1996. Top. Geobio. v.13, p.357, f.12A,B.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Little Eagle Lithofacies, Lower *nicolleti* Assemblage Zone. Float, concretion 1, face and outcrops at 2 separate sites around S end of SSE-trending ridge at SW corner of Long's Ridge, and 7.3 mi W of Whitehorse, Little Moreau Lake Quad., SW NE SE SE sec15T15NR25E, Dewey Co., South Dakota, USA. Collector: Speden, I.G., 1962.

Hypotype YPM 34115[d]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.22A-D.

Hypotype YPM 34117[d]

Landman, N.H. and K.M. Waage. 1993. Bull. Am. Mus. Nat. Hist. n.215, tf.22F.

Late Cretaceous, Maastrichtian, Fox Hills Fm, Trail City Mbr, Irish Creek Lithofacies, *Cucullaea* Assemblage Zone. Float, concretion, bluffs on N side of Moreau River, about 0.75 mi SW of confluence of Irish Creek and Moreau River, and 5 mi E of Thunder Butte Village, Dupree NE Quad., CENTER sec32T15NR21E, Ziebach Co., South Dakota, USA. Collector: Waage, K.M. and Speden, I.G., 1962.

[a]This specimen is a thin section.

[b]This is an ammonitella on an SEM stub.

[c]Cited as *Hoploscaphites* sp. or *Jeletzkytes* sp.

[d]This is a juvenile specimen mounted on an SEM stub.

Waagenoceras dieneri dieneri Böse

HYPOTYPE YPM 16823A

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.170, pl.39, f.3,4.

HYPOTYPE YPM 16823B

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.170, pl.39, f.5,6.

Permian, Word Fm. Third limestone, section 17, top of hill S of junction of Road and Gilliland Canyons, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

HYPOTYPE YPM 16824

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.170, tf.46B.

Miller, A.K. and W.M. Furnish. 1957. J. Paleont. v.31, n.6, tf.2B.

Permian, Word Fm. Third limestone, near junction of Road and Gilliland Canyons, Glass Mountains, Brewster Co., Texas, USA. Collector: Schuchert, C.

Waagenoceras dieneri girtyi Miller and Furnish

HOLOTYPE YPM 16666

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172, tf.53A.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, tf.22D, pl.33, f.1,2.

Late Permian. Bed 10 of Difunta section, concretionary shale 1300 m N42W of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16662[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172, tf.46A,B.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, pl.31, f.6,7.

Late Permian. Beds 5, 6 and 7 of Malascachas section, area 1200 m S17W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16663[b]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172, tf.45.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, tf.23, pl.32, f.7,8.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16664[c]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, pl.32, f.4.

Late Permian. Beds 5, 6 and 7 of Malascachas section, area 1200 m S17W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16665[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, pl.32, f.5,6.

Late Permian. Bed 2 of Difunta section, limestone lenses 25 m E of El Indio, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16667[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, pl.33, f.5-7.

Late Permian. Bed 10 of Difunta section, concretionary shale 1300 m N42W of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16668[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, tf.22A, pl.25, f.7, pl.34, f.7,8.

Early Permian, Leonardian, Leonard Fm. Section 14, top of bed 12, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

PARATYPE? YPM 16669[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, pl.33, f.4.

Late Permian. Bed 10 of Difunta section, concretionary shale 1300 m N42W of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16670[a]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, pl.33, f.4.

Late Permian. Bed 10 of La Difunta section, alternating shale and graywacke 60 m N35 E of La Difunta in the Valle de Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16671[d]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, pl.34, f.5,6.

Late Permian. Limestone bed 4 of Malascachas section, area 1300 m S18W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16672[e]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, pl.34, f.3,4.

Late Permian. Beds 5, 6 or 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16673[f]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, tf.22C, pl.34, f.1,2.

Late Permian. Bed 17 of Difunta section, limestone 1300 m S05W of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

PARATYPE? YPM 16674[g]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114, pl.34, f.9.

Late Permian. Bed 2 of Malascachas section, limestone layer 2000 m S47W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16678

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172, tf.46C,D,47C.

Late Permian. Beds 5, 6 or 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE? YPM 16682[h]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114.

Late Permian. Bed 17 of Difunta section, 2200 m N20E of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE? YPM 16688, 54952[j]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Late Permian. Bed 2 of Malascachas section, limestone layer 2000 m S47W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE? YPM 16690[k]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.114.

Late Permian. Bed 10 of La Difunta section, alternating shale and graywacke 60 m N35 E of La Difunta in the Valle de Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE? YPM 54953–54986[k]

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Late Permian. Bed 17 of Difunta section, alternating shale and graywacke 60 m N35 E of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE? YPM 54990–55007

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.172.

Late Permian. Bed 2 of Malascachas section, limestone layer 2000 m S47W of Noria de Malascachas, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

[a]Although Miller and Furnish (1940a) did not refer to this specimen as part of the type series, Miller (1944) refers to it as a paratype.

[b]Although Miller and Furnish (1940a) did not refer to this specimen as part of the type series, Miller (1944) refers to it as a paratype on pl.32, f.7,8.

[c]Although Miller and Furnish (1940a) did not refer to this specimen as part of the type series, Miller (1944) refers to it as a paratype on pl.32, f.4.

[d]Although Miller and Furnish (1940a) did not refer to this specimen as part of the type series, Miller (1944) refers to it as a paratype on pl.34, f.5,6.

[e]Although Miller and Furnish (1940a) did not refer to this specimen as part of the type series, Miller (1944) refers to it as a paratype on pl.34, f.3,4.

[f]Although Miller and Furnish (1940a) did not refer to this specimen as part of the type series, Miller (1944) refers to it as a paratype on pl.34, f.1,2.

[g]Although Miller and Furnish (1940a) did not refer to this specimen as part of the type series, Miller (1944) refers to it as a paratype on pl.9.

[h]Labeled as unfigured hypotype by A.K. Miller, but not cited by Miller and Furnish (1940).

[j]Labeled as figured specimen by A.K. Miller, but not cited by Miller and Furnish (1940a).

[k]Labeled as unfigured syntype by A.K. Miller, but not cited by Miller and Furnish (1940a).

Waagenoceras dieneri karpinskyi Miller

SYNTYPE YPM 16675

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.112, pl.31, f.8-10.

SYNTYPE YPM 16676

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.112, tf.22B, pl.31, f.11,12.

Late Permian. About bed 14 of Difunta section, concretionary shale in area of complicated structure SSE of Cerro Prieto Norte, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

SYNTYPE YPM 16677

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.112, pl.32, f.1-3.

Late Permian. Beds 5 and 7 of Difunta section, concretionary shale, collection made along strike from Cerro Wencelao on S to 300 m W of El Indio on N, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

Waagenoceras guadalupense (Girty)

HYPOTYPE YPM 16658

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.112, pl.31, tf.19B, pl.31, f.4,5.

Late Permian. About bed 14 of Difunta section, concretionary shale in area of complicated structure SSE of Cerro Prieto Norte, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

HYPOTYPE YPM 16661

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.112, tf.19A, pl.31, f.1-3.

Late Permian. Near bed 17 of Difunta section, about 50 ft below horizon of Peabody Locality B4835, about 80 m S of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

Waagenoceras guadalupense smithi Miller and Furnish

SYNTYPE YPM 16659

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.165, tf.50A.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.111, tf.19D, pl.32, f.11,12.

Late Permian. Beds 5, 6 and 7 of Malascachas section, area 1200 m S17W of Noria de Malascachas,

NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

SYNTYPE YPM 16660

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.165.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.111, tf.19C, pl.32, f.9,10.

Late Permian. Bed 17 of Difunta section, alternating shale and graywacke 60 m N35 E of La Difunta, NW of Las Delicias, Coahuila State, Mexico. Collector: King, R.E.

***Waagenoceras mojsisovicsi* Gemmellaro**

HYPOTYPE YPM 15228

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, tf.44.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, tf.20.

Permian, Sosio Beds. Calcare Compatto, Palermo, Sicily, Italy.

***Wiedeyoceras lineolatum* Miller**
See *Gonioloboceras*? sp.

***Wiedeyoceras nodomarginatum* Miller**
See *Gonioloboceras*? sp.

***Xenodiscites waageni* Miller and Furnish**

HOLOTYPE YPM 16283

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.74, tf.19A.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.126, tf.29D, pl.22, f.7,8.

=*Cibolites waageni*. Spinosa, C., W.M. Furnish and B.F. Glenister. 1975. J. Paleont. v.49, n.2, p.267.

PARATYPE? YPM 16284

Miller, A.K. and W.M. Furnish. 1940a. Geol. Soc. Am. Spec. Pap. n.26, p.74.

Miller, A.K. 1944. Geol. Soc. Am. Spec. Pap. n.52, p.126, pl.22, f.9.[a]

Early Permian, Leonardian, Leonard Fm. Section 12, bed 1, Glass Mountains, Brewster Co., Texas, USA. Collector: King, R.E.

[a]This specimen is cited as a paratype on pl.22, f.9, but is not part of the Miller and Furnish (1940) type series.

Acknowledgements

The authors wish to thank Brian Glenister, Neil Landman and David Work for reviewing this manuscript. Many thanks to Larry Gall and Rosemary Volpe for improving this catalog.

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